OPERATIONAL MANUAL

Global **Out-of-School Children** Initiative

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United Nations Educational, Scientific and Cultural Organization

UNESCO INSTITUTE for STATISTICS

GLOBAL PARTNERSHIP for EDUCATION

Understanding Children's Work

Cover photograph:
A third-grade student in Liberia practices arithmetic on a chalkboard.

Global Out-of-School Children Initiative Operational Manual
Global Initiative on Out-of-School Children

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Global Initiative on **Out-of-School Children**

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Acknowledgements

The Global Out-of-School Children Initiative Operational Manual is the product of the many hands, minds and partners who have worked on the initiative since it started in 2010. It draws on the national and regional studies that have successfully uncovered information on out-of-school children and pointed the way to recommendations and policies that will help make sure that all children can go to school and learn.

The work could not have been done without the support and expertise of government ministers and their representatives in the more than 30 countries where the studies were undertaken. Thank you for your help.

The manual also relied on the time and expertise of many research partners in the field including those in country and regional offices. The operational manual is based on all your hard work.

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THE MANUAL TEAM

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Abbreviations

5DE	Five Dimensions of Exclusion
CEE/CIS	Central and Eastern Europe and the Commonwealth of Independent States
DHS	Demographic and Health Survey
EMIS	Education Management Information System
ISCED	International Standard Classification of Education
MICS	Multiple Indicator Cluster Survey
MoRES	Monitoring Results for Equity System
NGO	non-governmental organization
OOSC	out-of-school children
OOSCI	Out-of-School Children Initiative
TVET	Technical and Vocational Education and Training
UIS	UNESCO Institute for Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNGEI	United Nations Girls' Education Initiative
UNICEF	United Nations Children's Fund

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Chapter 1
Introduction

Topics Covered in Chapter 1

An introduction to the OOSCI manual, including:

- Background on the Out-of-School Children Initiative
- Role of the study and analysis
- Purpose of the OOSCI manual

Chapter 1 introduces the *Operational Manual* for the Global Out-of-School Children Initiative (OOSCI), explains the function of the OOSCI study and analysis, and concludes by describing the purpose of this manual.

1.1 The **Out-of-School Children** Initiative

Despite dramatic improvements during the past decade, progress towards achieving universal primary education has stagnated. More than 59 million children of primary school age were out of school in 2013,[1] and nearly half of these children will probably never enter a classroom.

Children from poor households, rural areas or ethnic minorities, children with disabilities and those who must work to help their families face the greatest risk of being denied their right to education. A third of out-of-school children of primary school age live in West and Central Africa, the region with the largest number of out-of-school children. Eleven million children are out of school in Eastern and Southern Africa and 10 million children in South Asia.

Half of all out-of-school children live in conflict-affected countries. But exclusion from education is not just a concern for specific countries or regions. Middle- and high-income countries also experience problems such as chronic student absenteeism and high levels of dropout. Whether these problems are systemic and nation-wide or limited to specific parts of a country, such as depressed urban areas, the need to address them is equally pertinent.

The Global Out-of-School Children Initiative, a partnership between UNICEF and the UNESCO Institute for Statistics (UIS), was launched in 2010 to make a significant, sustainable reduction in the number of children who are out of school. The initiative receives support from the Global Partnership for Education and Understanding Children's Work, an inter-agency research initiative of the International Labour Organization, UNICEF and The World Bank.

The Out-of-School Children Initiative (OOSCI) aims to support countries in their study and analysis of out-of-school children and children who are at risk of dropping out by using innovative statistical methods to develop comprehensive profiles of excluded children, linking these profiles to the barriers that lead to exclusion, and identifying, promoting and implementing sound policies that address exclusion often from a multi-sectoral perspective. The manual aims to provide concise and powerful tools for achieving this goal.

1 UNESCO Institute for Statistics Data Centre, 'Number of Out-of-School Children of Primary School Age', 2015, http://data.uis.unesco.org/index.aspx?queryid=121&lang=en.

1.2 Role of the OOSCI Study

At the global level, completion of primary education by all children was the focus of the Education for All goals and the Millennium Development Goals to be reached by 2015 – and including all children in education is at the heart of the new Sustainable Development Goals. In its integrated framework for achieving the United Nations post-2015 development agenda, the United Nations System Task Team highlights universal access to quality education as an 'enabler' for inclusive social development.[2]

A national OOSCI study examines the issue of out-of-school children. Approximately two dozen countries from seven regions had embarked on an OOSCI study by 2014 and more countries are encouraged to carry out OOSCI studies.

The national studies make it possible to identify the barriers that are keeping children out of school or pushing them out before they have completed a full course of basic education. They also reveal gaps in data and research, inform policies to reduce exclusion from education, and form the basis for follow-up activities.

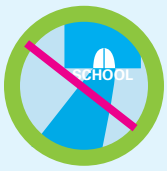
OOSCI studies are intended to stimulate policy changes and enable governments to target their strategies for reaching out-of-school children. By using a systematic approach to identifying out-of-school children and analysing the associated issues, the studies can guide education sector reforms that will help bring all children into school.

1.3 Purpose of the Manual

The *Global Out-of-School Initiative Operational Manual* is a how-to guide for using the OOSCI methodology, based on the shared experiences of the national and regional studies that have already been completed.

It presents a clear and consistent approach to studying the problem of out-of-school children and children at risk of dropping out from three angles:

1) who and where excluded children are;



2) the barriers and causes for exclusion; and

3) policies and strategies to remove these barriers.

Along with providing guidance for national studies, the manual can also be used to foster stronger national capacities in the collection and management of education statistics, policy analysis, and strategy development.

2 United Nations System Task Team on the Post-2015 UN Development Agenda, *Realizing the Future We Want for All: Report to the Secretary-General*, New York, June 2014, p. 24.

The 'Five Dimensions of Exclusion', a model described in Section 2.4, serves as the core model for analysing the situation of out-of-school children and children at risk of dropping out by compiling data on excluded children from pre-primary to lower secondary school age and across a wide range and multiple layers of disparities and degrees of exposure to education.

An important result of the early OOSCI studies was the development of new tools for analysing the data on out-of-school children, including the 'exposure to education' and the 'visibility' models discussed in Sections 2.1 and 2.2, respectively. The manual also paves the way for innovation, continuing to evolve as a useful tool, reference document and training module for countries or analysts interested in studying out-of-school children or children at risk of dropping out. The OOSCI studies have strengthened existing partnerships and led to new partnerships with government agencies, local non-governmental organizations (NGOs) and international organizations such as the United Kingdom Department for International Development (DFID) and the World Bank. OOSCI studies have shown that the challenges faced by out-of-school children cannot be tackled by one actor. Rather, the solution to many education barriers must involve sectors and partners that work with vulnerable children. A further aim of the operational manual is therefore to support this cross-sectoral work.

THE AUDIENCE FOR THIS MANUAL INCLUDES:

- Governments that want a better understanding of out-of-school children in their countries whether or not they are partners in the initiative
- Statisticians, policy advisers and Education Management Information System (EMIS) managers in ministries of education
- Members of teams preparing national or regional reports for the Out-of-School Children Initiative
- Staff members and consultants in UN agencies engaged in education programmes
- Academics, researchers and education professionals with an interest in improving education systems

Because readers will find that some parts of the manual are most relevant to their roles and responsibilities, a box at the beginning of each chapter highlights the key topics. In addition to the content provided in this manual, links to resources that are relevant for conducting an OOSCI study and analysis are provided in Annex A.

Chapter 2
Conceptual Framework

Topics Covered in Chapter 2

Key elements of the OOSCI conceptual framework, including:

- Categories of out-of-school children in terms of their exposure to education
- The Five Dimensions of Exclusion model for generating profiles of out-of-school and at-risk children
- The Visibility model for highlighting data gaps and ways to resolve them.

Chapter 2 outlines the conceptual framework for conducting national and regional OOSCI studies. It introduces categories of out-of-school children in terms of their exposure to education; outlines the Five Dimensions of Exclusion – the overarching model that informs OOSCI's work to bring all children into school; and introduces the Out-of-School Children Visibility Model, a complementary model.

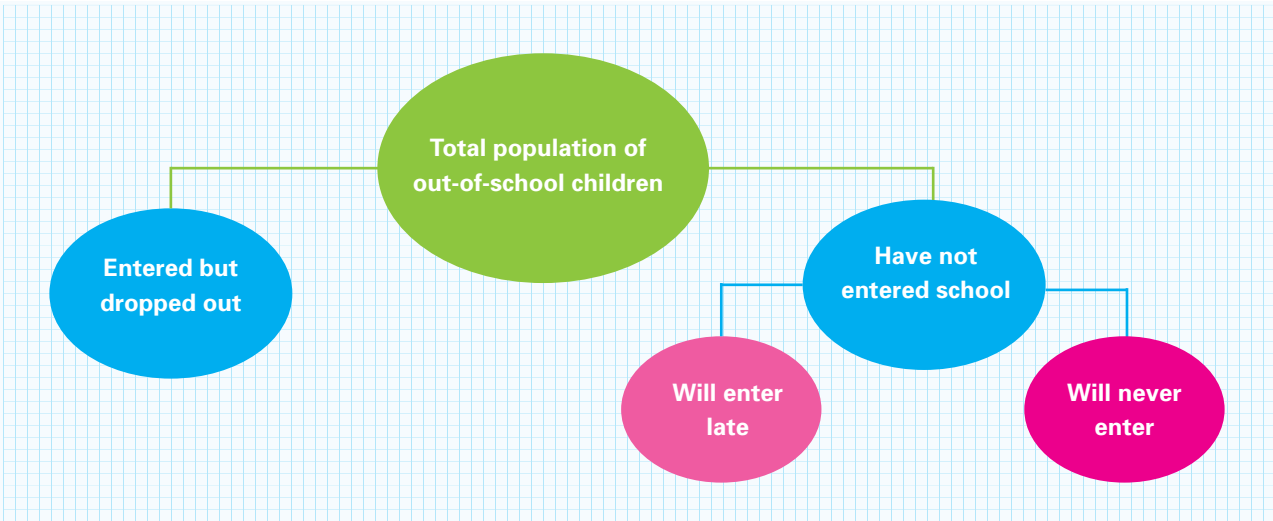
2.1 Exposure to Education

As shown in Figure 1, out-of-school children can be divided into two groups based on their exposure to education: those who entered school in the past and dropped out, and those who have not entered school. Not all out-of-school children are permanently excluded from education, and those who have not entered school can be divided into two subgroups: children who will enter school in the future and children who will never enter school. The relative size of these three mutually exclusive groups of out-of-school children varies from country to country.

Children who never enter school will, by definition, have no exposure to formal education at all – and will bear the attendant lifelong consequences. For children who entered school but dropped out and those who will enter school in the future, the consequences vary according to the timing and extent of their exposure to education.

Children who drop out in early grades are unlikely to have acquired even the most basic mastery of reading and writing, numeracy and other skills. Some children may complete the primary cycle but do not continue their education to the secondary level. Similarly, some children may leave school before or after completion of lower secondary education. All school leavers can, in theory, return to school in the future, but very few early school leavers continue their formal education.

FIGURE 1. CLASSIFICATION OF THE OUT-OF-SCHOOL POPULATION, BY SCHOOL EXPOSURE



Among children who will enter school in the future, their participation in primary education may be delayed by years after they reach the appropriate age for enrolment. An increase in this delay has been shown to place children at increased risk of dropout and low academic achievement. In fact, children who enter primary school late can be further divided: those who enter primary late from pre-primary education ('carried over' late entry due to delayed completion of pre-primary), and those who enter primary late not from pre-primary education ('pure' late entry). The policy implications to enrol children on time to primary school are different based on the type of late entry common in a country.

2.2 Five Dimensions of Exclusion

The Five Dimensions of Exclusion (5DE) are central to the OOSCI approach, presenting groups of children for analysis and interventions:

1. Children of pre-primary school age who are not in pre-primary or primary school
2. Children of primary school age who are not in primary or secondary school
3. Children of lower secondary school age who are not in primary or secondary school
4. Children who are in primary school but at risk of dropping out
5. Children who are in lower secondary school but at risk of dropping out

These dimensions span two different population groups (children who are out of school, and those who are in school but at risk of dropping out) across three levels of education (pre-primary, primary and lower secondary). The term 'exclusion' has a slightly different meaning depending on the population concerned: children who are out of school are excluded from education, while children who are at risk of dropping out may be excluded within education because they may face discriminatory practices or attitudes within the school.

Each dimension of exclusion represents a distinct group of children that can be analysed using statistical methods to identify the particular characteristics (or profiles) of the children most likely to be excluded.

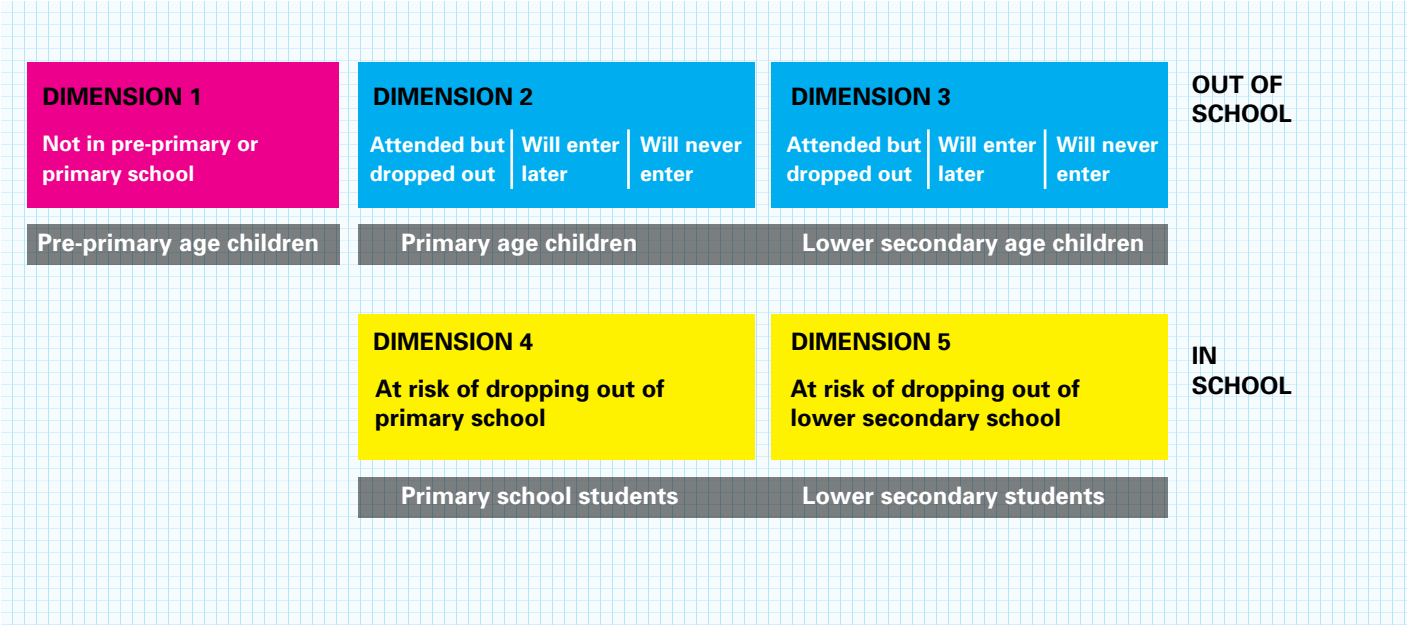
The 5DE model is illustrated in Figure 2. The levels of education are defined according to the International Standard Classification of Education (ISCED), which was designed by UNESCO to facilitate comparisons of education statistics and indicators across countries on the basis of uniform and internationally agreed definitions.[3] The respective age ranges that are used in conducting the OOSCI study, however, will vary according to national definitions.

The 5DE cover two types of populations: out-of-school children of school-going age and at-risk students of any age in primary or lower secondary school. Understanding more about the at-risk groups is key to preventing them from becoming the out-of-school children of tomorrow. It is important to emphasize that Dimensions 1, 2 and 3 relate to specific age groups, whereas Dimensions 4 and 5 relate to levels of education. Other aspects of note appear below.

DIMENSION 1 represents children of pre-primary school age who are not in pre-primary (ISCED 02) or primary education (ISCED 1). This group of children may not be adequately prepared for primary education, placing them at risk of not entering into primary education, entering late, or withdrawing after their initial participation.

3 UNESCO Institute for Statistics, *International Standard Classification of Education: ISCED 2011*, UIS, Montreal, 2012; open PDF at www.uis.unesco.org/Education/Documents/isced-2011-en.pdf.

FIGURE 2. THE FIVE DIMENSIONS OF EXCLUSION



Although pre-primary education programmes may be longer than one year, the 5DE model proposes a standard approach for all countries by focusing on pre-primary participation of children in the year preceding the official entrance age into primary school.

As an example, if the official primary entrance age in a country is 6 years, Dimension 1 includes children aged 5 years who are not in pre-primary or primary education. Children who attend non-formal or non-recognized pre-primary education programmes should be identified as a distinct group if the data are available. In countries where pre-primary education is not compulsory, Dimension 1 may be considered to represent children 'lacking school readiness' or 'not in school' rather than children 'out of school'. Regardless of whether pre-primary education is compulsory in a country, Dimension 1 should be quantified and studied, as non-attendance of pre-primary education is an important risk factor for dropping out of education in the future.

DIMENSION 2 represents children of primary age who are not in primary (ISCED 1), lower secondary (ISCED 2) or upper secondary education (ISCED 3).

DIMENSION 3 represents children and adolescents of lower-secondary age who are not in primary or secondary education (ISCED 1, 2 or 3).

Considering children of primary or lower secondary age in pre-primary education in the 5DE

Generally speaking, children and adolescents of primary and lower-secondary age who are still in pre-primary or non-formal education are considered to be out of school and are thus included in Dimensions 2 and 3 (see Section 2.2.1 for exceptions). Although pre-primary education is key to a child's development, the international definition considers children of primary school age or older who are in pre-primary education to be 'out of school' because participation in pre-primary by primary age children does not contribute toward universal primary education.

It is clear that participation in pre-primary or non-formal activities is different than participation in no educational activities at all. That is why when enrolment in pre-primary and non-formal education represents a large number or proportion of school-age children, these two groups relative to others should be considered separately in the analysis of data on out-of-school children.

However, some countries (in particular those with compulsory pre-primary education) may choose to consider primary and lower secondary age children in pre-primary education as in school. If so, the reporting should make clear the modification of the definition of Dimensions 2 and 3.

Lastly, out-of-school children of primary or lower-secondary age who completed primary education are different from children who did not complete the full primary cycle before leaving school. These groups of children should also be identified separately within Dimensions 2 and 3.

Dimensions 2 and 3 group out-of-school children by their age: primary age (Dimension 2) and lower-secondary age (Dimension 3). In addition, Dimensions 2 and 3 are divided into three categories, based on previous or future school exposure: children who attended in the past and dropped out, children who will enter school late (after the country's official age for entering primary school) and children who will never enter school (see Section 2.1).[4]

DIMENSION 4 represents children in primary school who are at risk of dropping out.

DIMENSION 5 represents children in lower secondary school who are at risk of dropping out.

Children in Dimensions 4 and 5 are in school but at risk of being excluded from education, and are grouped by the level of education they attend, regardless of their age: primary (Dimension 4) or lower secondary (Dimension 5).

The out-of-school dimensions and the 'in school but at risk' dimensions cover different populations and different age ranges. Because children of primary school age out of school (Dimension 2) and children in primary school but at risk of dropping out (Dimension 4) represent different populations, their numbers cannot be summed to represent the total population that is excluded from primary education or at risk of exclusion. To estimate the total number of excluded children, the analysis must be limited to a particular age range. For example, if the analysis is limited to children of primary school age, it is possible to add the number of children in Dimension 2 to the number of primary-age children in Dimension 4 to arrive at an estimate of the total number of children of primary school age who are excluded from education (Dimension 2) or at risk of exclusion (Dimension 4).

The 5DE model described above provides a static snapshot at a particular point in time, but there can, of course, be movement between the dimensions as children enter or leave the formal education system, as they transfer from one level of education to another, or simply as they become older. Looking at how children interact with the school system over time adds a dynamic perspective to the development of profiles of children excluded from education. Several indicators discussed in Section 4 examine progression through and exit from primary and lower secondary school, including the drop-out rate, repetition rate, and transition rate from primary to lower secondary education.

2.2.1 CONSIDERING NON-FORMAL EDUCATION IN THE 5DE

As defined in ISCED 2011, formal education is "education that is institutionalised, intentional and planned through public organizations and recognised private bodies, and – in [its] totality – constitute[s] the formal education system of a country. Formal education programmes are thus recognised as such by the relevant national education or equivalent authorities, e.g. any other institution in cooperation with the national or sub-national education authorities."[5]

Non-formal education, on the other hand, is "education that is institutionalised, intentional and planned by an education provider. The defining characteristic of non-formal education is that it is an addition, alternative and/or complement to formal education within the process of the lifelong learning of individuals. It is often provided to guarantee the right of access to education for all. […] Non-formal education mostly leads to qualifications that are not

4 It cannot be known with certainty which out-of-school children will or will not enter school in the future. For operational purposes, the second and third group are therefore analysed with reference to the probability of future school attendance ('likely to enter school late' and 'unlikely to ever enter school').

5 For additional details on formal education, see: UNESCO Institute for Statistics, *International Standard Classification of Education: ISCED 2011*, UIS, Montreal, 2012, pp. 80.

recognised as formal or equivalent to formal qualifications by the relevant national or sub-national education authorities or to no qualifications at all."[6]

In the context of OOSCI, children and adolescents who participate in non-formal education are considered to be out of school, unless the qualifications earned in the programme they attend are recognised as formal or equivalent to formal qualifications by national authorities. However, participation in non-formal education that is not equivalent to formal education is different from no exposure to school at all and should be reported separately when analysing data on out-of-school children.

Table 1 lists nine types of non-formal education activities and indicates whether they can be considered as equivalent to formal education for the purpose of OOSCI studies.

2.2.2 BENEFITS OF APPLYING THE 5DE MODEL

By applying the 5DE model, an OOSCI study identifies five quantifiable groups of children who are excluded from education or at risk of exclusion. In addition, OOSCI places detailed profiles of these children at the centre of analysis, through disaggregation of statistics according to such characteristics as age; gender; location; household wealth; ethnic, linguistic or religious group; and disability.

The model also enables links to be made between the profiles of OOSC and the barriers that have led to exclusion – and results of the analysis provide insight into the interaction between different characteristics of children and their households as they create mutually reinforcing patterns of disadvantage.

Factors that are linked to an increase in a child's risk of exclusion could include, for example, being a girl, living in a remote rural area, coming from a minority ethnic group – or multiple combinations. Barriers typically include limitations in the 'supply' of education, such as a shortage of teachers, or weaknesses in the 'demand' for education, such as a cultural bias against girls. They also appear at the political level, such as an inadequate allocation of the national budget to education. In many cases, the failure to meet national or international standards in such areas as teacher training or classroom construction can also act to keep children out of school.

Once these barriers have been identified, country studies can develop targeted proposals to address them. In many cases, these proposals involve measures that are considered to be outside the education sector, such as cash transfer programmes or a ban on child marriage.

The Five Dimensions of Exclusion represent an equity-focused approach that provides a rich source of information with key policy implications, including:

- By generating data on out-of-school children of both primary and lower secondary school age, as well as pre-primary school age, the model underlines the importance of the life-cycle approach.
- It draws attention to the patterns and forms of exposure to schooling: early school leavers and children who will enter late and children who are unlikely to ever enter school, as well as exposure to pre-primary education and non-formal education.
- The disaggregated analysis within the 5DE is key for a better understanding of the multiple and overlapping forms of exclusion and barriers to inclusion.
- The 5DE framework covers children who are currently in school but at risk of leaving before completion, thus identifying at-risk groups who may become the out-of-school children of tomorrow.
- While focusing on issues of access and retention, it also opens channels for a more sophisticated analysis of learning and completion, which can be used to highlight the importance of education quality as a factor related to school participation, including parents' decisions about sending children to school.

6 Ibid., pp. 81.

TABLE 1. CORE TYPES OF NON-FORMAL EDUCATION ACTIVITIES AND THEIR RELATIONSHIP TO THE 5DE GROUPS

Early childhood education — care and education services for young children from birth to the age of entry into primary education, as defined by the country	**IN SCHOOL** for children of pre-primary age only
Literacy — organized primarily to impart the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts	**NOT IN SCHOOL** include in Dimension 1, 2 or 3 depending on age of students
Equivalency schooling — organized primarily for children and youth who did not have access to or dropped out of formal primary/basic education; typically aims to provide an equivalency to formal primary/basic education, as well as mainstreaming children and youth into the formal system upon successful completion of the programme	**IN SCHOOL**
Life-skills training — programmes and activities organized to impart abilities to better function in daily life and to improve society, e.g., health and hygiene, HIV/AIDS prevention	**NOT IN SCHOOL** include in Dimension 1,2 or 3 depending on age of students
Income generation training/non-formal vocational training — training in income-generating productive service skills and trades, also referred to as livelihood training, with the aim of increasing productivity and income	**NOT IN SCHOOL** include in Dimension 1,2 or 3 depending on age of students
Rural development — education, training and extension services carried out in rural communities primarily to promote development by improving agricultural practices, animal husbandry, and natural resource management, e.g., water, soil, forestry	**NOT IN SCHOOL** include in Dimension 1,2 or 3 depending on age of students
Further education/professional development — advanced educational and training opportunities for learners who have acquired a particular level of education; can include specialized courses such as computer and language training	**NOT IN SCHOOL** Not in school – include in Dimension 1,2 or 3 depending on age of students
Religious education — organized learning about religion held in churches, mosques, temples, synagogues and other places of worship	**NOT IN SCHOOL** unless the curriculum is similar to other schools in the national education system and officially recognized as equivalent to formal school
Cultural/traditional education — cultural or traditional/ indigenous educational activities	**NOT IN SCHOOL** include in Dimension 1,2 or 3 depending on age of students

Types of activities adapted from: Connal, Criana, and Claude Sauvageot, *NFE-MIS Handbook: Developing a sub-national non-formal education management information system*, United Nations Educational, Scientific and Cultural Organization, Paris, 2005, p. M1-6.

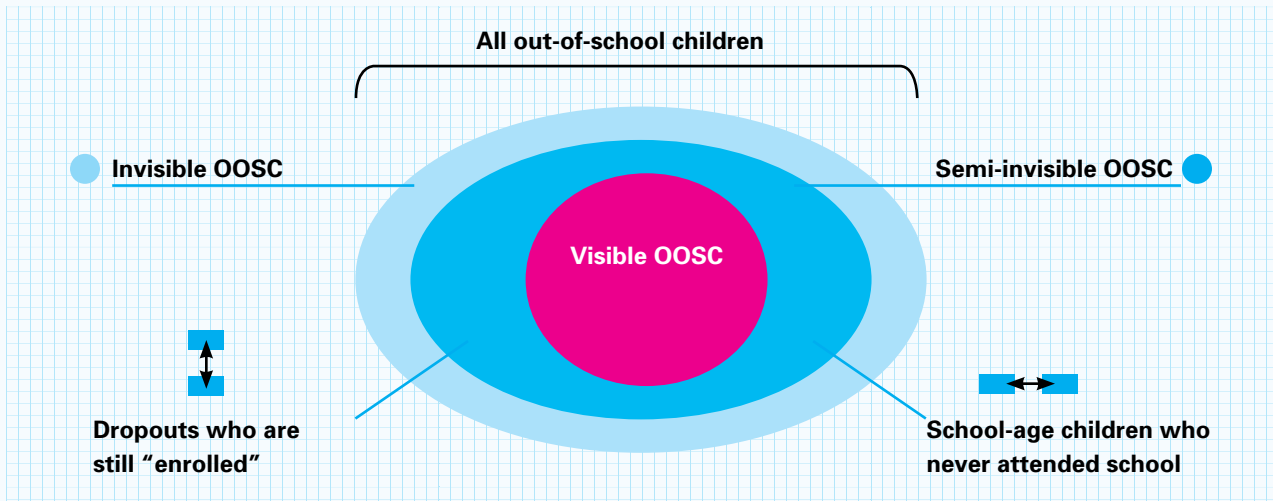
2.3 Out-of-School Children Visibility Model

The out-of-school children visibility model was created to highlight gaps in data on out-of-school children and children at risk of dropping out and provide a framework to improve data coverage and quality. Children facing a high risk of being out of school are often omitted from household survey and administrative data – most often homeless, institutionalized and nomadic children and children with disabilities. The model is additional and complementary to the 5DE model. It provides methods for collecting and analysing information on children 'invisible' in data. It allows researchers to estimate the number of out-of-school children and uses multiple data sources on children in addition to household surveys and administrative records to determine which children are out of school and, when possible, why.

THERE ARE THREE GROUPS OF VISIBILITY:

1. VISIBLE OUT-OF-SCHOOL CHILDREN: Out-of-school children who can be identified using the Ministry of Education database (EMIS) or other government education databases. Visible out-of-school children typically are school leavers (dropouts) because children who have never attended school are often not recorded.
2. SEMI-INVISIBLE OUT-OF-SCHOOL CHILDREN: Invisible out-of-school children who could be visible by cross-referencing government databases and checking school records. They consist of the following two groups:
    i. Unrecorded dropouts: Children who dropped out but were never recorded as such and who could be identified using improved vertical flows of information from the school level to the national level, in particular using student-absenteeism records.
    ii. Out-of-school children who never enrolled in school: Children who never enrolled but for whom information can be obtained from horizontal, cross-sector information flows (information sharing). Records on children can be linked through a unique ID, such as a birth certificate number, to identify those who are not recorded in the Ministry of Education database, but are recorded in other databases such as civil or local registries, whether electronic or paper based.
3. INVISIBLE OUT-OF-SCHOOL CHILDREN: Children who are not recorded in any government, administrative or school records and who are thus completely invisible. They generally represent the most vulnerable and disadvantaged children.

FIGURE 3. VISIBLE, SEMI-INVISIBLE AND INVISIBLE OUT-OF-SCHOOL CHILDREN (OOSC)



2.3.1 VISIBILITY AND THE 5DE

In the 5DE model, each dimension can be associated with expected levels of visibility according to the classification described above. This is shown in Table 2. Visible out-of-school children will generally be those in Dimensions 2 and 3 who have dropped out. Unregistered dropouts are semi-invisible out-of-school children (who may be erroneously included in Dimensions 4 or 5). Those who have never entered school, whether in Dimension 1, 2 or 3, could be either semi-invisible out-of-school children if they exist in administrative or school records, or invisible out-of-school children if they are not recorded in any government records at all.

Children in Dimensions 4 and 5 who are at risk of dropping out may be visible at the school level. Schools may, for example, monitor and provide support to children in difficult circumstances and children who display characteristics associated with dropout risk, such as frequent absence. However, they are often invisible at the regional and national levels, unless this information is reported by schools.

For more information on the visibility model please see Chapter 4 and Annex D.

TABLE 2. VISIBILITY MODEL AND THE 5DE

DIMENSION	GROUPS OF CHILDREN BY EXPOSURE TO EDUCATION:	GROUP OF VISIBILITY THESE CHILDREN MAY BELONG TO:
Dimension 1: Pre-primary-age out-of-school children	Have not entered school	Semi-invisible and Invisible out-of-school children
Dimension 2: Primary-age out-of-school children	Dropped out	Visible out-of-school children
Dimension 3: Lower secondary-age out-of-school children	Unregistered dropouts	Semi-invisible out-of-school children
	Have not entered school	Semi-invisible and Invisible out-of-school children
Dimension 4: At risk of dropping out from primary school **Dimension 5:** At risk of dropping out from lower secondary school	In school	May be visible at the school level, but invisible at regional and national level

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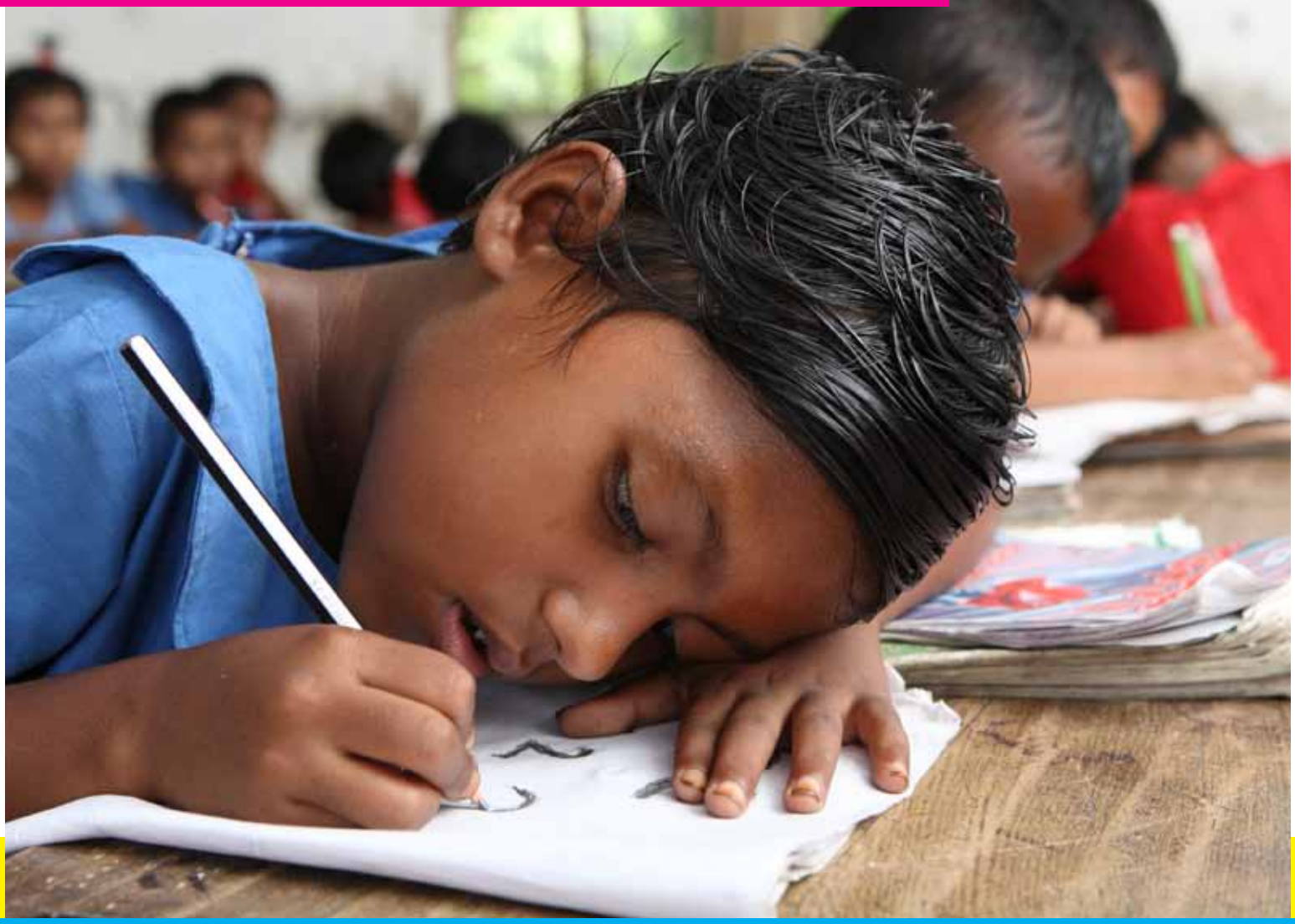
Chapter 3
Conducting an OOSCI Study



Topics Covered in Chapter 3

Fundamental steps for carrying out an OOSCI study, including:

- The importance of government leadership
- Preparing in advance for impact and follow-up
- Building Forming the steering committee
- Building Forming the technical team
- Setting the work plan and timeline
- Sample contents of an OOSCI study
- Review, launch and dissemination

Chapter 3 offers recommendations for producing a high-quality, timely OOSCI study. It focuses on the central role of national government leadership in the study, the importance of building a steering committee and technical study team, the work plan and the timeline. The chapter includes a sample table of contents, and concludes with tips on reviewing, launching and sharing the finalized study.

3.1 Considerations before beginning

OOSCI studies are fuelled by the commitment and leadership of national governments, especially education ministries. OOSCI studies also call for a steering committee appointed and chaired by the minister of education and a team of technical experts assigned or hired for the purpose of the study.

The steering committee and the technical teams generally include government representatives and include input from non-governmental organizations, United Nations Agencies including UNICEF and UIS, bilateral and multilateral agencies, and other national or regional consultants.

Typically, national studies are conducted with input from UNICEF country offices, with support from the UNICEF Regional Office, the UIS, and other OOSCI partners, including the Global Partnership for Education and Understanding Children's Work.

Before beginning the study, it is very important to outline the study's purpose. The end goal of OOSCI studies is to stimulate policy changes that bring more children into school and keep them there until successful graduation, and to improve the quality of education. Envisioning the next steps in advance is thus a primary step in preparing the study.

Planning for impact and follow-up also gives direction to the study itself. As the research, writing and review are carried out, it is useful to know how the study will be used once it has been completed and what outcomes it will contribute to.

The impact of the study depends on many factors, including government involvement, capacity of national teams and the resulting quality of the report, timeliness of the report and how recent the data are, the relationship between team members, and the extent to which follow-up activities are planned prior to and during production of the study. In addition to producing a study, the process can raise awareness of out-of-school children as an important cross-sectoral issue, lead to coordination of policies and decision making on out-of-school children between ministries, raise awareness of other data sources and projects on out-of-school children, and support capacity development of ministries and partners such as non-governmental organizations and United Nations agencies.

The remaining sections of Chapter 3 offer details on how to make the study process smooth, well-timed and effective. These guidelines are based on OOSCI's assessment of previous experience, which highlights the advantages of taking the following actions:

- Make sure the government and especially its education ministry is committed to the study and leads it.

- Create a high-level OOSCI task force and a core technical team with the expertise and flexibility to conduct the study from beginning to end.
- Identify and communicate potential problems and capacity gaps related to the study.
- Prepare in advance for continuity in the case of changes in the study team members.
- Set a realistic timeline that specifies the work to be completed and study component to be delivered.
- Adapt the scope of the study to the resources and time available.

3.2 Government Leadership

Country governments and ministries of education are the starting point of any OOSCI study and analysis. Indeed, commitment from the government and education ministry is necessary for the success of the study and whether it has value as a tool for policies that lead to a reduction in the number of out-of-school children. However, involvement is necessary from multiple government organizations and from high-level representatives and technical staff, including the EMIS manager. Government ministries and agencies involved in OOSCI studies have included:

- Ministry of Education
- National Statistical Office
- Ministry of Health (for issues related to children with disabilities)
- Ministry of Labour (for issues related to child labour)
- Ministry of Social Protection (for issues related to welfare, poverty)
- Ministry responsible for ethnic minority issues

Once government leadership has expressed an interest in conducting an OOSCI study, United Nations agencies, including UIS and UNICEF, and non-governmental agencies can act as responsive partners helping to facilitate the process, depending on the needs, resources available and capacity identified.

OOSCI consultations usually begin by communicating the value of new and more in-depth analysis on out-of-school children. The next step is to share the UNICEF and UIS methodology, including the *OOSCI Operational Manual*. The 2014 OOSCI flyer[7] provides an overview of the study and analysis; other relevant documents might include previous national and regional studies (see Annex A, external resources) and the 2015 OOSCI Global Report "Fixing the Broken Promise of Education for All".[8] The next stages of discussion will explore why it is important to conduct the study, and how the results of the study can be used in the policy planning cycle or in existing initiatives.

Successful OOSCI partnerships can lead to more effective methods of monitoring out-of-school children and to demonstrable improvements in policies and strategies to bring more children into school and keep them there.

Government leadership strengthens the research by providing the expertise of staff with inside knowledge of the education system who can help access data.

Solid collaboration between government, partners and consultants can lead to multiple benefits for the study's outcome, including:

7 Global Partnership for Education, Understanding Children's Work, UNESCO Institute for Statistics and United Nations Children's Fund, 'Out-of-School Children Initiative', UNICEF, New York, January 2014, www.unicef.org/education/files/UNICEF_UIS_OOSCI_flyer.pdf.
8 Available from http://allinschool.org/wp-content/uploads/2015/05/oosci-global-report-en.pdf

- The research is more likely to be used for positive change that will enable a country to reduce the numbers of children and adolescents excluded from education.
- When high-level government officials and key decision makers are engaged, the significance and scale of change is more likely to increase.
- As government representatives, staff of UNICEF and other international organizations, and researchers become familiar with the OOSCI methods, their long-term capacities for such applications as monitoring and evaluation will be enhanced.
- It may lead to greater opportunities for collaboration between the government, UNICEF, the UIS and other OOSCI partners.

The national context determines the extent to which UNICEF, external experts and other partners contribute to the study. The study requires a significant time commitment, so it requires an evaluation of the various counterparts and their ability to invest time and resources. Sometimes government leaders may decide more external technical assistance will be needed to complete the study efficiently and effectively. Potential political sensitivities and their effect on whether the findings will be accepted need to be considered, as they could influence the direction and outcomes of the study.

A process of engagement is recommended and can include:

- An invitation letter to a national government representative from a UNICEF or UIS representative (see Annex B).
- A government representative responds with a formal letter of acknowledgement.
- Informal discussions follow to clarify the terms of reference for carrying out, disseminating and utilizing the study.
- A formal declaration of interest that outlines the specific commitments of all stakeholders could be developed as a memorandum of understanding.
- All partners develop a joint work plan outlining roles and responsibilities for the study team and a detailed timeline, as discussed in Sections 3.3 and 3.4.
- A working relationship is established between the government and OOSCI partners before beginning the study, and the purpose and content of the report are made clear.

3.3 The Steering Committee

OOSCI studies call for a steering committee of high-level participants appointed and chaired by the minister of education or another government representative. The steering committee helps mitigate obstacles encountered during the study and ultimately approves the final report. The steering committee is also responsible for hiring the technical team. In addition, the steering committee members are responsible for raising the profile of the OOSCI study in their respective organizations, and in other committees and working groups relevant to out-of-school children that they may participate in (such as a Local Education Group).

Typically the steering committee consists of representatives from national organizations including:

- Ministry of Education
- Ministry of Finance and Planning
- National statistical office
- Ministry of Health
- UNICEF
- UIS
- Bilateral and multilateral agencies
- Other relevant development agencies or NGOs with high interest in out-of-school children issues

It is recommended that the chairperson of the steering committee should be the Permanent Secretary of the Ministry of Education or another government representative of a similar level.

3.3 The Technical Team

OOSCI national teams typically include technical experts from government ministries, UNICEF staff from country or regional offices, UIS regional staff, consultants or institutions engaged for writing the country report, and other stakeholders such as development partners. The role of the technical team is to gather relevant data and research to inform the OOSCI study and to conduct quantitative and qualitative analysis on the profiles, barriers and policies for out-of-school children leading to policy recommendations and to compose the country OOSCI study. Consultants are often recruited as part of technical teams to collaborate on the analysis, writing the report or to provide guidance, support and feedback during this process.

Because the capacity of technical teams will ultimately determine the quality of the study, each team should bring together a broad range of expertise, covering education statistics, barriers to education relevant to the national context, and national education policies. It is also crucial that members of the team have both the required proficiency and the time and flexibility to complete the study even when there are unforeseen delays.

- UNICEF staff act as a resource on the methodological framework, including the 5DE, and on the identification of barriers and the creation of policy proposals covered in Chapter 5 of the *Operational Manual*. UNICEF also acts as a resource on issues related to children with disabilities, costing (the Simulations of Equity in Education model), and qualitative analysis. In addition, it trains teams that conduct the study, and conducts a review of the OOSCI study.

- UIS staff act as a resource for questions related to the methodological framework, including the 5DE and the typology of out-of-school children, data and indicators on out-of-school children and at-risk students, statistical analysis, and the creation of profiles of out-of-school children and children at risk of exclusion – the topics covered in Chapter 4 of the *Operational Manual*. In addition, it trains teams that conduct the study and conducts a review of the draft profiles chapter of the OOSCI study.

- GOVERNMENT REPRESENTATIVES are an essential part of the technical team. In particular, government EMIS manager should be included in the team, as well as a national education policy expert.

- STATISTICIANS AND ANALYSTS have the crucial role of generating the data tables on out-of-school children and analysing them. As an expert member of the team, a statistician would need to be familiar with both administrative and household survey data. Competencies will include experience with statistical software, in order to use statistical code provided, and with Excel in order to use the UIS typology and Dimension 4 and 5 spreadsheets.

  Experience from the early OOSCI studies has shown that the time and expertise required to generate and analyse statistical tables and graphs is often underestimated. It is difficult to find a statistician who also has the required skills for writing the report, and likewise, finding good writers who have the required statistical expertise. Therefore, the person who does the statistical work may need to be hired separately from the report authors. If the production of the statistical analysis and the writing are done by different people, it is essential to ensure that the report authors engage in a great deal of dialogue with the statistician to understand the challenges and gaps encountered, as well as to ensure the interpretation of indicators is correct.

- THE AUTHOR(S) of a national or regional OOSCI study will need to have a broad range of expertise, including fluency in the national language or languages, a solid understanding of education statistics, knowledge of the national education system, a strong background in education policy, knowledge of and sensitivity to social and cultural dimensions of education exclusion, and excellent writing skills.

  In addition, since the problems faced by out-of-school children extend beyond education, expertise in other fields such as poverty, social protection, disability, and child labour will be necessary, depending on the country context. This may necessitate hiring several consultants with different areas of expertise, involving representatives from different ministries, or engaging an institute that offers a broad set of expertise. In this case, different authors may be assigned to different chapters or chapter sections according to their area of specialization. When there are multiple authors, an editor or primary author will need to finalize the report, to ensure the structure and writing style are consistent throughout, and confirm that the chapters are properly linked.

  Desirable assets include work experience in the region or country, understanding of UNICEF's work or previous work with UNICEF or other United Nations agencies, fluency in the local language, and experience working with vulnerable groups.

- THE FOCAL PERSON will need a broad range of expertise and excellent communication and coordination skills, aligned with capacities to coordinate the study and ease transitions when new consultants or staff members join the team. Typically, this is a UNICEF staff member. It is helpful if the focal person is given responsibility for coordinating (or reviewing) multiple studies in a region, and for conducting the initial review and overall quality check of the national study before external experts review drafts. In this regard, the focal point's responsibilities will include: facilitating communication between national teams and experts, identifying capacity gaps or problems with the report, and providing and mobilizing additional support where needed.

  Key roles and qualifications are set out in sample Terms of Reference (ToRs) for the Technical Team, Steering Committee and consultants, which can be found in Annex C.

3.4 Work Plan, National Workshop and Timeline

The scope of an OOSCI study will inherently affect the amount of work and time needed to prepare the report for publication. While the *OOSCI Operational Manual* presents the ideal structure and content of a study, it also recognizes the diversity of resources available in each country. The study's scope can be adapted, for example, by omitting optional components such as upper secondary education. The study and analysis could also be adjusted to focus on the components that are most relevant in a specific national context or a region, such as out-of-school children of lower secondary school age or specific ethnic, religious or linguistic groups.

Once the purpose and scope of the study are decided, all partners should jointly develop a work plan that includes the launch, dissemination, impact and follow-up activities – as well as data collection and assessment, analysis, report

writing and review. Such a work plan should distinguish between the activities, agreements and outputs (deliverables) to be completed at each of these stages.

NATIONAL TRAINING for the Steering Committee and technical teams on OOSCI concepts and methodology is also needed. The training will also introduce data analysis processes found in Chapter 4 of this manual and the barriers and policy analysis found in Chapter 5 (see *Annex N*).

3.5 The Study Structure

Table 4 lists the proposed content for a national study. This structure is intended as guidance and is designed to support an effective presentation of the study findings and recommendations. While the basic structure facilitates harmonization across studies, the content of each study should be adapted to the country context and the key messages the report aims to communicate.

AFTER THE OVERVIEW OF THE GLOBAL INITIATIVE ON OUT-OF-SCHOOL CHILDREN (SEE SECTION 1.1 OF THIS MANUAL), THE INTRODUCTION OFFERS:

- A brief description of the national education system, which should contain information on the age ranges for the different levels of education, including pre-primary, primary, lower secondary and (optionally) upper secondary. To render indicator estimates internationally comparable, the UIS uses ISCED to classify education programmes by level of education (according to the curriculum content, entrance age and duration, teacher qualifications, and other criteria). This description should therefore note whether the national education system structure differs from the ISCED classification.
- Information on the country context, i.e., geographical, political, socio-economic development, situation of the education sector, main actors and stakeholders.
- The methodology and data sources used for the study, and the findings of the data quality assessment, as applied in the study based on Chapter 4 of the *Operational Manual*.

For the core chapters – profiles of excluded children, and barriers and policies – the items listed in Table 4 are examples identified in a hypothetical study and analysis. The actual profiles, barriers and policies will be listed in order from most important to least important.

Guidance for structuring the profiles of excluded children chapter is provided in Section 4.8; for guidance on structuring the barriers and policies chapter, see Section 5.4.

Across all studies, it is strongly recommended that the general methodology and indicators are used as specified in this manual. This ensures international comparability of the national results, one of the key strengths of OOSCI. In addition, the proposed methods are designed to improve approaches to obtaining the most accurate figures on out-of-school children, and OOSCI encourages governments to adopt the OOSCI Operational Manual.

TABLE 3. SAMPLE TIMELINE FOR THE OOSCI STUDY

PHASE	DESCRIPTION	DATES	TEAM MEMBERS
1	Prepare for the study, including planning the impact and next steps and forming the steering committee and technical teams		
2	Conduct a detailed inventory of existing data relevant to out-of-school children, and assess data quality		
3	Conduct national training workshop to convene the steering committee and train the technical team		
4	Collect data from various sources and generate the data tables on children in the 5DE		
5	Analyse available data and identify key profiles of children in the 5DE, as well as data gaps		
6	Write the profiles chapter		
7	Collect further evidence through desk research and review the data; analyse profiles in relation to barriers, existing policies and proposed policies		
8	Write the barriers and policies chapter		
9	Submit the first draft		
10	Review the first draft		
11	Integrate reviewers' comments and submit the final draft		
12	Review the final draft		
13	Submit the final report to the steering committee		
14	Acquire and document approval by the government		
15	Launch and disseminate the study		
16	Assess impact and conduct follow-up activities		

The phases listed above can be adjusted slightly, but they should usually be carried out in sequence. The data tables need to be generated and analysed, and the gaps and limitation in the data documented, before the chapter on profiles of excluded children is written; this enables a concrete story to emerge, which informs the structure and focus of the profiles chapter. The profiles chapter needs to be completed before starting the barriers and policies chapter, which is based on the profiles analysis. Carrying out each phase in order will help create a logical flow between the chapters – and ensures that the study concludes with evidence-based policy recommendations.

TABLE 4. THE OOSCI NATIONAL STUDY STRUCTURE, INCLUDING SAMPLE CONTENT AND SUGGESTED NUMBER OF PAGES

CONTENT	# OF PAGES
Preface Preface (signed by a government official, a UNICEF and a UIS representative)	1
List of abbreviations	
Executive summary	5
Chapter 1. Introduction **Overview of the Global Initiative on Out-of-School Children** **Education system** **Country context** **Methodology, data sources, and quality**	10
Chapter 2. Profiles of excluded children **Introduction** **Five Dimensions of Exclusion:** — Children not in school of pre-primary age: Dimension 1 — Out-of-school children of primary and lower secondary age: Dimensions 2 and 3 — Children in primary and lower secondary school at risk of dropping out: Dimensions 4 and 5 **Key profiles of excluded children:** — Profile 1 (e.g., internally displaced children in region X) — Profile 2, etc. **Analytical summary**	20
Chapter 3. Barriers and policies **Introduction** **Barrier 1** (e.g., lack of public transportation) — Introduction — Profiles of children affected (e.g., girls living in remote areas, children with disabilities) — Existing policies (e.g., transportation vouchers) — Recommended policies (e.g., provide transportation for children in remote areas, make school buses accessible to children with disabilities) **Barrier 2** (e.g., indirect costs of education) — Introduction — Existing policies (e.g., abolish school fees) — Recommended policies (e.g., cash transfers, scholarships, free textbooks) **Barriers to evidence-based policy** **Analytical summary**	30
Chapter 4. Conclusion **Key profiles, barriers and corresponding policy proposals** **Data and policy recommendations and way forward**	5
References	
Annexes	
Total suggested number of pages =	**100**

This does not preclude the need for adaptations that better suit the national or regional context, for example, as mentioned previously, the correspondence between national definitions of the education system and ISCED levels. In cases where it is not possible to follow the statistical methodology precisely, it is recommended that the study team seeks expert guidance from the UNESCO Institute for Statistics early in the process to most efficiently address any problems or issues encountered during the statistical analysis (see *Section 3.3*).

3.6 Review, Launch and Share

Before the study is published, it must be reviewed and approved by all key partners, including the government, the UIS, and the UNICEF regional office. A well-coordinated review process is important to prevent mistakes, avoid unnecessary work and waiting periods, and meet the timeline for completing the studies.

When the study is initiated, the review process needs to be agreed upon and clarified with all members of the team, including consultants and experts who have agreed to review the studies. The review typically consists of multiple cycles. When taking account of this process in the timeline, it is advisable for different reviewers to work on the drafts simultaneously; the focal person can then collate all comments into one document that will be reviewed by reviewers and, ultimately, the steering committee.

To maximize the study's impact, plan the launch and dissemination in advance with government partners and other stakeholders. A communication strategy for sharing the report findings needs to identify objectives, target audiences and stakeholders, along with key messages for specific audiences and targeted methods to reach the audience.

POSSIBLE COMMUNICATION METHODS INCLUDE:

- Organize a high-profile launch event with government partners, including senior government officials, NGOs and other stakeholders.
- Organize a workshop to plan implementation of the study's recommendations.
- Engage with, invite and contribute to mass media (TV, radio and the press).
- Engage with and invite local celebrities to the launch event.
- Present the findings at national and international conferences.
- Create a brochure that summarizes the findings.
- Publish the report on the OOSCI website http://allinschool.org.
- Develop a website or blog to disseminate the findings.[9]
- Report and discuss the findings with the public through social media.
- Involve youth in the launch and dissemination.

To develop and carry out a communication and dissemination plan, it may be necessary to recruit a specialist. For more details see the UNICEF Advocacy Toolkit (www.unicef.org/evaluation/files/Advocacy_Toolkit.pdf) and the dissemination and communication strategy developed for the Out-of-School Children Initiative in Latin America and the Caribbean.[10]

9 For an OOSCI website, see: 'Education Equity Now!', UNICEF CEE/CIS, www.education-equity.org.

10 Passarella, D., and I. Kit, 'Coordinating Communication Plans with the Out-of-School Children Initiative in Latin America and the Caribbean', Asociación Civil Educación Para Todos, Buenos Aires, 2012.

Chapter 4
Data Sources, Indicators and Profiles

Topics Covered in Chapter 4

Essential information on data sources, indicators and profiles including:

- How to identify the best available data sources
- How to minimize and explain differences in estimates of the 5DE
- How to present statistics and data tables in a compelling narrative

Chapter 4 describes the eight steps required for producing the quantitative analysis in an OOSCI study.

The steps are:

1. Create an inventory of national quantitative data on children in and }out of school.
2. Conduct a data quality assessment to identify sources of potential errors and discrepancies.
3. Calculate indicators in each of the Five Dimensions of Exclusion (5DE) and complete data tables using standard indicator methodology and data calculation tools.
4. Conduct disaggregated analysis to determine individual and household characteristics of children in each of the 5DE.
5. Analyse the flow of children in and out of the education system and identify where the system loses students by analysing indicators of entry and exit.
6. Identify key profiles that highlight the most important individual and household characteristics of children in each of the 5DE.
7. Document data gaps and limitations.
8. Develop a persuasive and reader-friendly narrative that describes children in each of the 5DE using data and analysis.

OVERVIEW OF DATA SOURCES

Researchers of an OOSCI national study and analysis must consider multiple data sources because no single source can provide a complete profile of out-of-school children and children at risk of dropping out.

There are two main sources of quantitative data on children:

1. ADMINISTRATIVE DATA – refer to data on student enrolment collected by schools usually through an annual school census.
2. HOUSEHOLD SURVEY AND CENSUS DATA – refer to data on the school attendance of children collected by interviewers with a household survey questionnaire.

ADMINISTRATIVE DATA SOURCES: ADVANTAGES AND LIMITATIONS

Administrative data are routinely collected on education systems by national governments. They primarily provide enrolment information.[11] Because administrative data focus on students, they are especially useful for providing a picture of children in school and at risk of dropping out (Dimensions 4 and 5).

Administrative data have limitations. Because enrolment records only include children in school, administrative data provide no direct information on out-of-school children. Also, data collection by national governments may not cover all schools, and there may be concerns about the accuracy of data reported by schools. Private schools and non-formal programmes not managed by the ministry of education may not be included in administrative enrolment statistics. Administrative data may also lack detailed information on students' individual or household characteristics.

HOUSEHOLD SURVEY DATA: ADVANTAGES AND LIMITATIONS

Household surveys and population censuses provide attendance information and are typically conducted by government agencies or development partners. Because they collect information from households, the data are particularly useful for analysing children out of school (Dimensions 1, 2 and 3). Household surveys collect information on background factors including sex, location, household wealth, ethnicity, child labour status, and parental education, which makes them useful for in-depth profiles of children in all dimensions of exclusion.

Limitations to household survey data include:[12]

- It is difficult to link children to the school they attend.
- Large household surveys are not conducted annually.
- Household surveys are sample based and often do not include the homeless, street children, nomadic populations, or children in institutions such as hospitals, orphanages or juvenile detention centres.
- Precision of sample-based estimates and the level of disaggregation are limited.

Sample size and design of the survey are important considerations for the assessment of suitability and quality of a dataset. When reporting indicator values for small sub-groups of the population, only publish estimates based on at least 25 unweighted observations. This threshold is applied in reports by two large international survey programmes, the Demographic and Health Survey (DHS) and the Multiple Index Clustery Survey (MICS).[13] Another frequently used measure of the quality and precision of an estimate is the relative standard error (RSE).[14]

11 Most education data in the UIS Data Centre at http://data.uis.unesco.org, including data on enrolment, teachers and finance, are provided by national authorities to the UIS in response to an annual education survey. See UNESCO Institute for Statistics, *Global Education Digest 2008: Comparing education statistics across the world*, UIS, Montreal, 2008. The data are collected and processed in a manner consistent with international standards, such as the International Standard Classification of Education (ISCED), and they are therefore internationally comparable.

12 UNESCO Institute for Statistics, 'Measuring educational participation: Analysis of data quality and methodology based on ten studies', Technical Paper no. 4, UIS, Montreal, 2010, p. 8.

13 In DHS and MICS reports, estimates based on 25 to 49 unweighted cases are published with a note on the small sample size; in summary tables these estimates are placed in parentheses. Indicator estimates for smaller groups are not published.

14 The relative standard error (RSE) is calculated as the standard error divided by the mean of an estimate, expressed as a percentage. If the primary net attendance rate (NAR) is 50% and the standard error 1%, the relative standard error is 1% / 50% = 2%. Estimates with an RSE above 30% are commonly considered unreliable.

DISCREPANCIES IN DIFFERENT DATA SOURCES

Estimates of the rate and number of out-of-school children calculated from different data sources can vary. For example, the primary-age out-of-school rate for Mozambique based on administrative data is 14% in 2011 according to the UIS, while according to calculations from DHS data, the rate is 23% in 2011.[15] Discrepancies are an unavoidable reality and the reasons must be identified and explained in the quantitative analysis in the profiles chapter.

In some cases, the differences can be minimized by using standard indicator methodology and definitions (as described in Steps 2 and 3). However, administrative data and household surveys measure education participation in different ways.[16] Administrative sources usually focus on reporting of enrolment at the beginning of the school year. By contrast, household surveys estimate educational participation with data on school attendance. The most commonly used measure in survey data is attendance at some point during the school year, based on information provided by a parent or guardian. In DHS and MICS surveys, a child is considered to have been in school if he or she attended for at least one day in the reference school year.

Accurate age data are essential for indicators such as the out-of-school rate. Administrative and household survey data collections do not always occur at the same time, and both sources are susceptible to problems with the reliability of age information. One possible reason is lack of birth certificates.[17] In household surveys one respondent typically provides age information for all household members, which can be inaccurate. Household surveys are often not coordinated with the academic calendar and the timing of a survey can introduce discrepancies in age data used for age-based indicators like the out-of-school rate. Guidance on how to identify and minimize the error related to the timing of a household survey is provided in Step 3. The Data Inventory and the Data Quality Assessment Worksheets described in Steps 1 and 2 are designed to identify important differences between data sources that may lead to different estimates of the number of children out of school and at risk of dropping out.

4.1 Step 1: Create a Data Inventory

PURPOSE

A data inventory identifies and documents all recent sources of administrative and household survey data on enrolment and attendance in a country and ensures that the quantitative analysis is based on the best sources available. The data inventory can reveal gaps in knowledge about issues, regions or subgroups of the population that may be avenues for future research.

15 For more information see: United Nations Children's Fund and UNESCO Institute for Statistics, *Fixing the Broken Promise: Findings from the Global Initiative on Out-of-School Children*, UNICEF and UIS, Montreal, January 2015.

16 For more information see: UNESCO Institute for Statistics, United States Agency for International Development, ORC Macro, United Nations Children's Fund and Network on Schooling in Africa, Guide to the analysis and use of household survey and census education data UIS, USAID, ORC Macro, UNICEF and FASAF, Montreal., 2004.; UNESCO Institute for Statistics (and United Nations Children's Fund, Children out of school: Measuring exclusion from primary education, UIS and UNICEF, Montreal, 2005.; UNESCO Institute for Statistics, 'Measuring educational participation: Analysis of data quality and methodology based on ten studies', Technical paper no. 4. UIS, Montreal, 2010.; United Nations Children's Fund and UNESCO Institute for Statistics, *Fixing the Broken Promise: Findings from the Global Initiative on Out-of-School Children*, UNICEF and UIS, Montreal, January 2015.

17 UNESCO Institute for Statistics, 'Measuring educational participation: Analysis of data quality and methodology based on ten studies', Technical Paper no. 4, UIS, Montreal, 2010.

The inventory should include primary data sources on children in and out of school from the last five years. Older data can be included if no data collection took place during the last five years, or if the analysis is comparing trends over time. Data that have information on out-of-school children for a specific region of the country or for a specific subgroup of the population should also be documented.

Data sources inventoried should be accompanied by a full set of documentation to determine which data were collected in a rigorous manner. This information will be essential for Step 2.

Data sources to consider include:

- Administrative data (from an education management information system) collected by the ministry of education
- National household surveys or population censuses
- Demographic and Health Surveys (DHS)
- Multiple Indicator Cluster Surveys (MICS)
- Living Standards Measurement Studies (LSMS)
- Statistical Information and Monitoring Programme on Child Labour (SIMPOC)
- Data on refugees from UNHCR, on internally displaced people from International Organization on Migration, etc.
- International Household Survey Network (IHSN)
- Understanding Children's Work (UCW) survey database. More information on child labour data and analysis is in Annex K.[18]
- National or international learning assessments (PISA, SACMEQ, PASEC)

THE DATA INVENTORY TEMPLATE

The data inventory template available in Annex E offers a suggestion for a systematic approach to collecting information on national concepts and measures of school participation and related indicators. This information is necessary for a correct interpretation of the results of any analysis and can be used to improve future data collection instruments.

The template is filled out for each data source. The information required can be found in the documentation for the data source. It may be necessary to contact the agency or focal person for detailed information on the source.

Uses for the data inventory

The data inventory can be used in two ways:[19]

- It can contribute to the Data Quality Assessment Worksheets described in Step 2.
- It can be summarized at the outset of the profiles chapter and be used to provide readers with a rationale for why certain datasets were chosen.

18 Access data sources at: DHS: dhsprogram.com; MICS: http://mics.unicef.org; LSMS: www.worldbank.org/lsms; SIMPOC: www.ilo.org/ipec; EGRA: www.eddataglobal.org; IHSN: www.ihsn.org; and UCW: www.ucw-project.org.

19 For further information on data quality standards for administrative data, see UNESCO Institute for Statistics, *Global Education Digest 2008: Comparing education statistics across the world*, UIS, Montreal, 2008; UNESCO Institute for Statistics and UNESCO Regional Bureau for Education in Africa, *Assessing Education Data Quality in the Southern African Development Community (SADC)*: A synthesis of seven country assessments, UNESCO, Paris, March 2010. For data quality standards for household survey data, see UNESCO Institute for Statistics, U.S. Agency for International Development, ORC Macro, United Nations Children's Fund, Union for African Population Study and Network on Schooling in Africa, *Guide to the Analysis and Use of Household Survey and Census Education Data*, UIS, Montreal, 2004; UNESCO Institute for Statistics, 'Measuring educational participation: Analysis of data quality and methodology based on ten studies', Technical Paper no. 4, UIS, Montreal, 2010.

4.2 Step 2: Conduct Data Quality Assessment

PURPOSE

Step 2 is an assessment of the quality of the data sources. It focuses on using the Data Quality Assessment Worksheet (see *Annex F*), which allows researchers to identify common data problems and choose data sources wisely. The assessment also includes a series of questions that need to be answered and it relies on experts' observations.

COMPLETING THE DATA QUALITY ASSESSMENT WORKSHEET

Complete one assessment worksheet for each data source. The relevant information can usually be drawn from the Data Inventory Template completed in Step 1, but it is encouraged to interview the agency responsible for the data source for more detail.

The worksheet allows analysts to calculate a score for each source, which can serve as a guideline for assessing data quality and suitability. A high score indicates that a source may be a good candidate for data analysis.

National experts should also rely on their judgement and expertise to identify the best data sources.

The findings of the worksheets can be used in to:

1. Determine the best data sources for analysis.
2. Understand potential sources of errors and discrepancies.

The results of the worksheets are intended to support the development of the profiles chapter, and are not intended for publication in an OOSCI study.

EXPERTS

The data assessment should draw on the expertise of the specialists in the country's education sector who form the technical team and steering committee. All data providers indicated in the official data inventory should be closely consulted to ensure the coverage of data sources is adequately documented.[20]

20 In some cases, sample surveys are undertaken by entities outside the ministry of education or central statistics office. These entities might have been consulted by national governments or development partners to conduct thematic studies, for example on specific themes related to child labour or girls. These studies may in some cases provide useful and detailed insights on the status of out-of-school children at the national and sub-national level.

OTHER CONSIDERATIONS

Definitions

An exploration of different data sources may reveal different government figures for out-of-school children and children at risk of dropping out. This may be due to differing definitions, for example when:

- There is no explicit definition of out-of-school children and dropout at the national level.
- More than one definition is adopted by different ministries or even within ministries.
- Those making the calculations have a different interpretation of how indicators should be calculated if methods are not strictly defined.

A national definition of 'out of school' begins with defining the population of children who should be in school. This entails identifying the age range of children who must attend school, and in particular specifying a primary entry age. Next, the definition must describe which types of educational programmes attended by children qualify them as being counted 'in school' (see Section 2.2 for the international definition of out-of-school children). Once established, the definition should include at what point and for what reasons a child should be considered as dropped out. This includes examining if and how absenteeism is taken into account in the definition of dropout, for example through guidelines on how many days of absenteeism for no legitimate reason constitute having dropped out. The definition should also explicitly specify the legitimate reasons for absenteeism such as illness. If absenteeism is not taken into account, reported national dropout figures may be lower than the actual number of dropouts.

Data gaps

Data gaps occur when the ministry of education does not collect administrative data from some types of schools, including institutions for children with disabilities, private schools, community-run schools, preschools and kindergartens, Technical and Vocational Education and Training (TVET), schools in refugee camps, or home-schooled children. Analysts should keep in mind the possibility of fragmented information systems when assessing the number of out-of-school children. In some instances, other national ministries maintain records on enrolment of students, for example data on participation in pre-primary education or enrolment of youth may be collected through ministries of youth or other agencies outside ministries of education.

Analysts should ascertain whether administrative or household survey data have any gaps in coverage of the education of school-age children in the country.

Invisible, semi-invisible and visible out-of-school children

Data sources must also be evaluated for whether they provide information on the 'invisible', 'semi-invisible' and 'visible' out-of-school children in the Five Dimensions of Exclusion (see *Chapter 2*). For example, household surveys may not collect data on nomadic or refugee children, and administrative data may not include data on some schools for children with disabilities. Some sources may not include information on children at risk of dropping out by not routinely collecting data on students' pre-primary experience, an important risk factor for dropout in the early grades of primary education. Box 1 describes how to fill the data gap on semi-invisible and invisible out-of-school children.

BOX 1. FINDING 'INVISIBLE' AND 'SEMI-INVISIBLE' OUT-OF-SCHOOL CHILDREN WHO ARE NOT CAPTURED IN ADMINISTRATIVE DATA ON EDUCATION

Identifying children who are out of school is often an exercise in improving data quality. Careful analysis can reveal gaps in a country's data on out-of-school children, which may be resolved by improving records, linking multiple databases and using innovative approaches to identify children completely absent from government records.

Semi-invisible out-of-school children can be identified in countries with relatively robust government data collection systems and by cross checking the ministry of education database with other government databases. For example, by comparing child-level records in the Education Management Information System (EMIS) with the civil registry, it is possible to identify children recorded in one database but not in the other. If a particular school-age child is not registered in the EMIS but is registered in the civil registry database, the child is either out of school, or the civil registry may be inaccurate. Lastly, a further challenge is to adequately track the movement of students. For example, existing policies may encourage the re-entry of students who have previously dropped out of school, however, these students may not be adequately tracked by existing information systems.

Potential data issues encountered in finding semi-invisible out-of-school children include:

- Children migrated abroad but are still recorded in the civil registry as living in the country.
- Enrolment in certain types of schools or institutions may not be recorded by the ministry of education, such as schools or institutions not under its jurisdiction.
- Errors in the unique identification code for children can lead to a mismatch when comparing records across databases.
- Incorrect recording of children's birth dates can skew data on whether the child is of compulsory school age.
- Long-term truants are identified as such in records at the school level, but are still counted as enrolled in national data. The period of non-valid absenteeism that is indicative of having dropped out – or no longer being enrolled in school – is a matter to be defined in legislation.

Invisible out-of-school children are, by definition, children who are not registered in any government or school database. They include children who do not have any legal status in their current country of residence, and often children with disabilities (see *Annex L*), homeless children, internally displaced children, refugee children, and children in nomadic communities.

GENERAL QUESTIONS

These questions should be considered when evaluating data. The answers will help with Step 7 of the analysis.

- Which national data sources are the most representative, recent and of the highest quality and are the best candidates for statistical analysis and creation of profiles of children in the 5DE?
- Which levels of disaggregation are possible for the development of profiles of out-of-school children? Examples: age, sex, location, household wealth quintile, mother's education, ethnicity, etc.
- Are there sources of data on particular issues or for particular regions that could be used in a case study, in addition to the main data source for the country report?
- Are there any important gaps in the data on out-of-school children and children at risk of dropping out for certain regions or subgroups of the population?
- Is there a way to acquire data on these groups from small-scale or qualitative studies to complement the main analysis?
- What are the major differences between the household survey data chosen for the calculation of indicators and the administrative data, which may cause discrepancies between the estimates?
- Do national concepts and definitions match international standards, including the definitions of education indicators by the UIS? If not, how do they differ?
- Which source of national population data will be used: population data based on estimates by a national statistical agency, or by the UN Population Division?

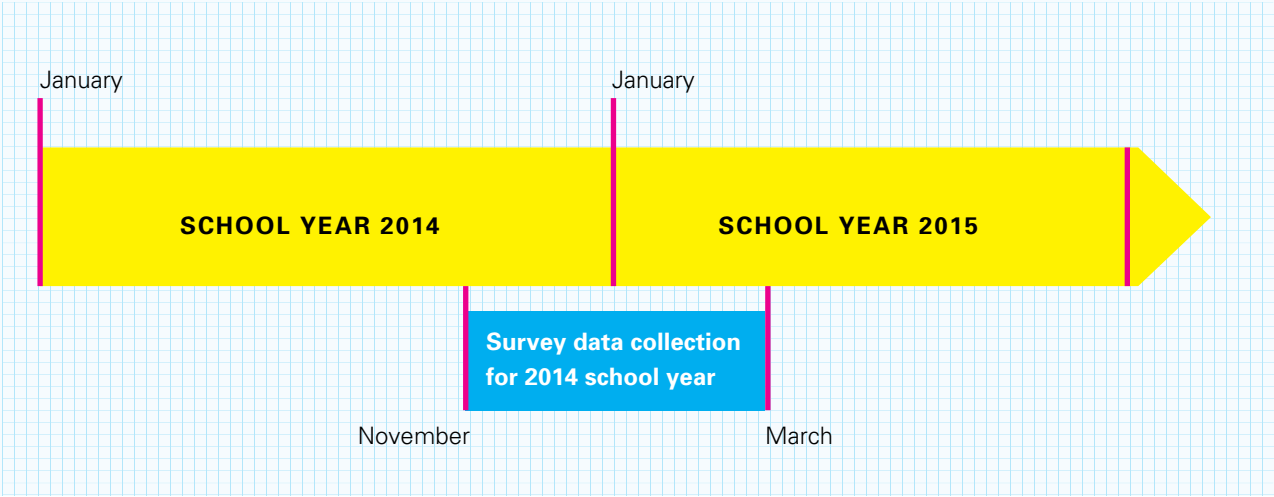
4.3 Step 3: Calculate 5DE Indicators and Complete Data Tables

After determining the best data sources for analysis, indicators can be calculated and the relevant data tables can be generated. This chapter provides indicator formulas for administrative and household survey data for each of the 5DE.

CONSIDERATIONS FOR THE CALCULATION OF INDICATORS

Additional concerns about data may arise when the dataset is opened and the calculation of indicators is started. Many errors may exist in the data, but discrepancies in age data merit special attention.

FIGURE 4. AGE ERRORS IN HOUSEHOLD SURVEY DATA



Age discrepancies

Household survey data collection may occur many months after the start of the academic year, which can introduce errors into the age data used to calculate education indicators.

Education systems generally define the official ages for a level of education based on the age at the beginning of the academic year. For example, children may be required to enter grade 1 of primary education if they are 6 years old by 1 February. Household surveys, on the other hand, may collect data on educational status and age many months after the start of the school year. When this happens, children in school may be wrongly considered over-age even if they were at the appropriate age for their grade at the start of the school year. This distinction is important when considering overage attendance as a proxy for dropout risk. Analysts should also avoid identifying children as out of school if they had not reached the official entrance age when the school year started.

As a result, it is recommended that age data be adjusted to the approximate age at the start of the school year. If the birth date of school-age children is available, ages should be adjusted to the age of the child at the start of the school year, as done in recent MICS surveys and some national surveys. If the birth date is not available, and the gap between the school year start and the survey data collection is more than six months, it is recommended that the analyst adjust all age data backwards by one year (age – 1).[21] Although this second option does not eliminate all associated errors, it reduces the error caused by the gap in data collection.

Moreover, descriptive statistics may indicate age heaping – an unusually high share of ages ending in 0 and 5. Such patterns can be caused by uncertainty of survey respondents about their own age or the age of other household members. Methods to reduce age heaping in survey data typically do not yield data that are significantly more reliable and such methods are therefore not further discussed in this document. However, the presence of age heaping is an indicator of poor data quality and can have a significant impact on indicator estimates for the school-age population.

CALCULATING THE INDICATORS

To calculate indicators, first examine school attendance by age to reveal trends in school participation. Core Table 1 in Annex J provides a breakdown of school attendance by age and level of education. Participation in non-formal education programmes can be reported separately, but such non-formal programmes should be clearly distinguished from the formal programmes listed in Core Table 1.

21 This is the current practice used by the UIS in cases where no data are available on the birth date of school-aged children in a household survey. In such cases the UIS adjusts the ages if data for the majority of children were collected more than six months after the start of the school year.

DIMENSION 1: PRE-PRIMARY AGE CHILDREN NOT IN SCHOOL

To estimate the rate and number of children not in school in Dimension 1, use data on the school attendance status of the population in this age group from administrative data or household survey sources.[22] 'Pre-primary age' refers to the age one year below the official age of entry into primary education.

EQUATION 4.1

The percentage of pre-primary age children not in school can be calculated as follows:

$$\text{Per cent of children of pre-primary age who are in pre-primary or primary education} = \frac{\text{Number of children of pre-primary age enrolled in pre-primary or primary education}}{\text{Number of children of pre-primary age}}$$

EQUATION 4.2

The percentage of pre-primary age children not in school can be calculated as follows:

$$\text{Out-of-school rate for children of pre-primary age} = 100\% - \text{Per cent of children of pre-primary age who are in pre-primary or primary education}$$

EQUATION 4.3

The number of children not in school of pre-primary age is calculated as follows:

$$\text{Number of out-of-school children of pre-primary age} = \text{Out-of-school rate for children of pre-primary age} \times \text{X number of children of pre-primary age}$$

Core Table 2 in Annex J presents a suggested layout for data on out-of-school children of pre-primary age. Only children in formal pre-primary or primary education programmes should be identified as being in school. If data for other forms of early childhood education are available, they can be reported separately, for example in a note attached to Core Table 1.

Most countries have found that child labour, a level of disaggregation in Core Table 2, is limited among pre-primary aged children. Although Annex K suggests limiting child labour analysis in OOSCI studies to children from the starting age of starting compulsory education up to the minimum age for admission to employment, it may be of interest to add child labour status as an additional level of disaggregation for data on school attendance of pre-primary aged children.

Optional Table 1 in Annex J presents time series with the out-of-school rate for children of pre-primary age.

22 Children in Dimension 1 may not be considered to be 'out of school' if pre-primary education is not considered to be part of compulsory education in a particular country. In such cases, calculating Dimension 1 indicators is still important as a measure of school readiness. To distinguish pre-primary-age children from compulsory school-age children, they can be referred to as 'not in school' rather than 'out of school'.

DIMENSION 2: CHILDREN OF PRIMARY SCHOOL AGE OUT OF SCHOOL

To establish the rate and number of out-of-school children of primary school age it is necessary to identify how many children are in school. The most common indicators for the measurement of participation are the net enrolment rate (NER) and the net attendance rate (NAR).

The primary NER is derived from enrolment records and indicates the share of children of primary school age who are enrolled in primary education. [23]

EQUATION 4.4

$$\text{Primary NER} = \frac{\text{Number of children of primary school age enrolled in primary education}}{\text{Number of children of primary school age}}$$

The equation above does not consider primary-age children in secondary school. To correctly count primary-age children out of school, one must refer to the primary adjusted net enrolment rate (ANER).

EQUATION 4.5

$$\text{Primary ANER} = \frac{\text{Number of children of primary school age enrolled in primary or secondary education}}{\text{Number of children of primary school age}}$$

The net attendance rate (NAR) and adjusted net attendance rate (ANAR) are derived from household survey data. To determine the NAR and ANAR, replace 'enrolled in' with 'attending' in Equations 4.4 and 4.5.[24]

The out-of-school rate for children of primary school age is calculated as the difference between 100% (universal enrolment or attendance) and the primary ANER.

EQUATION 4.6

$$\text{Out-of-school rate for children of primary school age} = 100\% - \text{Primary ANER}$$

Replace 'ANER' by 'ANAR' in Equation 4.6 when working with data on attendance instead of enrolment.

By applying the out-of-school rate to the number of children of official primary school age, one can calculate the number of OOSC of primary school age.

EQUATION 4.7

$$\text{Number of out-of-school children of primary school age} = \text{Out-of-school rate for children of primary school age} \times \text{Number of children of primary school age}$$

23 Formulas and additional information for most indicators described in this section can be found in the Education Glossary of the UIS at www.uis.unesco.org/glossary.

24 For further information regarding the comparability of school enrolment and attendance data, see UNESCO Institute for Statistics, U.S. Agency for International Development, ORC Macro, United Nations Children's Fund, Union for African Population Study and Network on Schooling in Africa, *Guide to the Analysis and Use of Household Survey and Census Education Data*, UIS, Montreal, 2004.; UNESCO Institute for Statistics and United Nations Children's Fund, Children Out of School: Measuring exclusion from primary education, UIS, Montreal, 2005; United Nations Educational, Scientific and Cultural Organization, Education for All Global Monitoring Report: Reaching the marginalized, UNESCO, Paris, 2010.

Only children in formal primary or secondary education programmes should be identified as being in school. If data on enrolment in non-formal programmes recognized as equivalent to formal programmes are available, these children should also be identified as being in school.

For monitoring progress towards universal primary education and similar goals, children of primary school age in pre-primary education are considered to be out of school. The rate and number of primary-age children in pre-primary education should be reported separately to provide a complete picture of the characteristics and educational status of children who are considered out of school. Countries that wish to consider children of primary school age in pre-primary education as in school should clearly identify the proportion and number of these children as shown in Optional Table 2 of Annex J.

Core Table 3 in Annex J suggests a layout for data on out-of-school children of primary school age. Core Table 4 presents time series with the same data, if available. Core Table 5 contains data on the school exposure of primary-age out-of-school children (see *Step 4*).

DIMENSION 3: CHILDREN OF LOWER SECONDARY SCHOOL AGE OUT OF SCHOOL

To establish the rate and number of out-of-school children of lower secondary school age, it is necessary to identify how many children are in school. The lower secondary NER is derived from enrolment records and indicates the share of children of lower secondary school age who are enrolled in lower secondary education.

EQUATION 4.8

$$\text{Lower secondary NER} = \frac{\text{Number of children of lower secondary school age enrolled in lower secondary education}}{\text{Number of children of lower secondary school age}}$$

When working with data on attendance, the lower secondary NAR can be calculated by replacing 'enrolled in' by 'attending' in Equation 4.8.

The calculation of the percentage of out-of-school children of lower secondary school age is different from the calculation for primary school age. The lower secondary ANER and ANAR only consider children who are in secondary or post-secondary education, as shown in Equation 4.9.

EQUATION 4.9

$$\text{Lower secondary ANER} = \frac{\text{Number of children of lower secondary school age enrolled in secondary or post-secondary education}}{\text{Number of children of lower secondary school age}}$$

However, some children of lower secondary age attend primary school and should not be considered out of school. The out-of-school rate for children of lower secondary school age in primary school is therefore calculated as follows.

EQUATION 4.10

Out-of-school rate for children of lower secondary school age =100%
- Lower secondary ANER
- Percentage of children of lower secondary school age enrolled in primary education

When working with household survey data on school attendance, replace ANER with ANAR and 'enrolled in' with 'attending in Equations 4.9 and 4.10.
The number of out-of-school children of lower secondary school age is calculated from the out-of-school rate.

EQUATION 4.11

Number of out-of-school children of lower secondary school age
=
Out-of-school rate for children of lower secondary school age
×
Number of children of lower secondary school age

As with Dimension 2, only children in formal primary or secondary education programmes or non-formal programmes recognized as equivalent to formal programmes should be identified as being in school.

Core Table 6 in Annex J suggests a layout for data on out-of-school children of lower secondary school age. Core Table 7 presents time series with the same data, if available. Core Table 8 contains data on the school exposure of out-of-school children of lower secondary age.

DIMENSIONS 4 AND 5: CHILDREN IN PRIMARY AND LOWER SECONDARY SCHOOL AT RISK OF DROPPING OUT

The OOSCI study and analysis also focuses on the children who are at risk of dropping out.

Estimating the number of children in school who are at risk of dropping out is less straightforward than counting children who are out of school because all children in school face some risk of dropping out.

This section presents two options for the statistical analysis:

1. Quantify the number of children in school who are likely to drop out
2. Calculate indicators for the most important risk factors associated with early school leaving

METHOD 1: CALCULATE THE RATE AND NUMBER OF CHILDREN IN SCHOOL WHO ARE LIKELY TO DROP OUT

The most widely used indicators to assess progress and completion of a level of education is the survival rate to the last grade. The survival rate to the last grade of primary education is calculated as follows:

EQUATION 4.12

$$\text{Survival rate to last grade of primary education} = \frac{\text{Number of children who entered grade 1 of primary education and reached the last grade}}{\text{Number of children who entered grade 1 of primary education}}$$

The survival rate to the last grade of primary education can be reported in Optional Table 3 (see *Annex J*). The calculation of the survival rate to the last grade of lower secondary education is similar:

EQUATION 4.13

$$\text{Survival rate to last grade of lower secondary education} = \frac{\text{Number of children who entered grade 1 of lower secondary education and reached the last grade}}{\text{Number of children who entered grade 1 of lower secondary education}}$$

The survival rate to the last grade of lower secondary education can be reported in Optional Table 6 (see *Annex J*). The rate of children who enter Grade 1 who are expected to leave school before reaching the last grade is:

100% – survival rate to the last grade of primary education, or

100% – survival rate to the last grade of lower secondary education

The survival rate described above only provides the expected rate of school leaving for children in the first grade of the given level. To calculate an estimate for Dimension 4 or 5, an expanded survival rate indicator is needed to capture school leaving for students in all grades of primary or lower secondary education. By examining observed survival and dropout rates from primary and lower secondary education, it is possible to calculate the total percentage and number of children who are likely to drop out of a level of education before they reach the last grade, other things being equal.[25] For example, if primary school in a country has six grades, it is possible to calculate the percentage of all children in Grades 1 to 5 at a given point in time who are likely to drop out before they reach Grade 6.

The percentage of primary students who drop out before the last grade is calculated as follows and can be reported in Core Table 9 (see *Annex J*):

EQUATION 4.14

$$\text{Percentage of children in primary education who drop out before last grade} = \frac{\text{Number of children in primary education who drop out before last grade}}{\text{Number of children in primary education} - \text{Number of children in last grade of primary education}}$$

25 With data from administrative records and household surveys it is typically not possible to calculate the percentage of children who complete the last grade of a level of education or who drop out from the last grade before completing that level. It is also not possible to calculate the total percentage and number of children in all grades of primary or lower secondary school who are likely to drop out before they complete the level they are currently attending.

The percentage of lower secondary students who drop out before the last grade is calculated as follows and can be reported in Core Table 10 (see *Annex J*):

EQUATION 4.15

$$= \frac{\text{Percentage of children in lower secondary education who drop out before last grade}}{\text{Number of children in lower secondary education who drop out before last grade}}{\text{Number of children in lower secondary education} - \text{Number of children in last grade of lower secondary education}}$$

The number of primary and lower secondary students who drop out before the last grade is given in the numerator of the two equations above. Two spreadsheets have been developed – one for primary education (Dimension 4) and one for lower secondary education (Dimension 5) – that facilitate the calculation of the rate and number of early school leavers. Additionally, a cohort flow spreadsheet has been developed to visualize the flow of students who progress or leave primary and lower secondary education. The documentation for these spreadsheets can be found in Annex I.

METHOD 2: RISK FACTORS FOR EARLY SCHOOL LEAVING

Children who left school early can be easily identified in household survey data and their characteristics – age, sex and family background – can be studied to determine factors associated with the risk of non-completion of primary or lower secondary education. The characteristics of these early school leavers can be compared to children in school to identify groups that are at an elevated risk of dropout.

One potential risk factor for early school leaving, with particular relevance to Dimension 4, is lack of early childhood education. This indicator can be reported in Optional Table 4 (*see Annex J*).

EQUATION 4.16

$$= \frac{\text{Percentage of new entrants to primary education without early childhood education}}{\text{Number of new entrants to grade 1 of primary education without early childhood education}}{\text{Number of new entrants to grade 1 of primary education}}$$

Another potential risk factor is being overage for one's grade. Being overage in a grade could be the result of late entry into school, grade repetition, or drop out and re-entry to school.[26] The age–grade gap can be measured with both administrative and household survey data. As a result, it can be monitored over time and can be disaggregated by subgroups of the population (see *Step 4*).

However, analysis of overage attendance should be combined with analysis of other indicators of risk. Inaccurate age data is a significant problem in administrative and household survey data from countries without well-established birth registration systems.

In addition, not all overage children are at greater risk of dropping out. In some countries, parents are allowed to decide when to send their children to primary school. Holding children back for one year before they enter school can, in some cases, reduce the risk of dropout. Analysts working on studies in countries where there are substantial concerns about the accuracy of age data and where the government has flexible starting age policies should take extra caution when using overage attendance or enrolment as an indicator of the dropout risk.

Analysts who examine age as an indicator of risk are advised to focus on the percentage of children who are at least two years overage to reduce errors in measurement and to avoid overestimating the share of children who are at risk of dropping out. For a complete picture, it is also useful to report the percentage of children who are underage or at the official age for their grade, as proposed in Optional Tables 5 and 7 in Annex J.

Lastly, low learning achievement is a risk factor of early school leaving. Where data are available, for example from a national learning assessment, it may be possible to generate profiles of students who perform poorly.

Analysts are also advised to present complete profiles of children who left school early by identifying at what level and grade they left school, as described in Step 5.

GUIDANCE FOR ANALYSIS OF UPPER SECONDARY EDUCATION

Upper secondary education is not included in the 5DE model because the level is not compulsory in most countries. For analysts working on OOSCI studies that choose to incorporate analysis of upper secondary education, several concerns should be taken into account in the statistical analysis.

1. Upper secondary education (ISCED 3) comprises a wider range of programmes than lower levels of education, especially with regard to TVET. These programmes have a diversity of providers, which may include different government ministries and the private sector. The diversity of programme types and of providers poses challenges for data collection and accurate indicator estimates. Therefore it is important to ensure that the data sources used for generating upper secondary enrolment indicators comprise the fullest range of upper secondary programmes.

2. Youth of upper secondary age have the right to education and the right to work. An OOSCI study that includes upper secondary-age children should consider different combinations of school enrolment, work, and training available to youth. As a result, upper secondary-age youth not enrolled in upper secondary education but who work are not considered to be out of school.

3. A different approach from the 5DE model is needed to set indicators for children of upper secondary age. Upper secondary-age youth can be divided into three categories: children who work, children who study, and children who are idle.

26 United Nations Children's Fund and UNESCO Institute for Statistics. *Completar la Escuela: Un Derecho para Crecer, un Deber para Compartir. América Latina y el Caribe*. Global Initiative on Out-of-School Children. UNICEF and UIS, Panamá, 2012.

Statistical analysis could focus on:

- If working: What sector? What skill level is required?
- If studying: What level of education? What type (general or vocational)?
- For children not in school identify:
  - educational attainment,
  - employment status,
  - reasons for non-attendance.
- Study patterns of transition
  - between levels of education,
  - between school and work.

Some optional tables for the analysis of upper secondary are provided in Annex J. More detailed guidance on the analysis of upper secondary education is planned for the future.

WHAT ARE INTERNATIONALLY COMPARABLE EDUCATION INDICATORS AND WHERE CAN I ACCESS THESE DATA?

While the primary purpose of the OOSCI study is for national policymaking, it may be useful to report internationally comparable estimates of the key indicators for the 5DE to show the status of a country in relation to international development goals. Such indicators allow for comparisons between countries in the same region, or countries at a similar stage of development.

Internationally comparable data can be obtained at the UIS Data Centre (http://data.uis.unesco.org) and at the UNICEF data portal at http://data.unicef.org.

Internationally comparable education data have three main features:

1. Consistent definitions and indicator methodology, as described in the OOSCI Operational Manual and the online UIS Glossary.[27]
2. Internationally comparable data: The UIS uses data from the United Nations Population Division (UNPD) for estimates of the school-age population, which are based on a variety of sources depending on the country – including national censuses, surveys, and vital and population registers.
3. International Standard Classification of Education (ISCED): ISCED is a framework developed by UNESCO to facilitate the presentation of education data in a uniform and internationally comparable manner. By applying the criteria of ISCED, national education programmes can be classified into corresponding ISCED levels.[29] In some cases, the national classification of education programmes and corresponding age ranges differ from their classification in accordance with ISCED, which can result in discrepancies in indicator calculations.

27 The UIS Glossary includes statistical terms for education, science, technology and innovation, culture, and communication and information. Some entries provide more detailed information, such as definitions, calculation formulas for indicators and sources. Many entries contain translations in: Arabic, English, French, Spanish or Russian.
28 The ISCED mappings of national education systems can be accessed at: http://www.uis.unesco.org/isced.

4.4 Step 4: Conduct disaggregated data analysis

Disaggregated analysis is analysis of population subgroups. Such analysis is important for understanding the individual, household, school, or community characteristics of children in the 5DE. The purpose of disaggregated analysis is to identify groups of children that face higher rates of exclusion or risk of exclusion, to analyse the specific barriers they face and develop solutions to reach them. Household survey data and administrative data can be used in disaggregated analysis to develop key profiles of out-of-school children and children at risk of dropping out (see Step 6).

Characteristics that can be examined include:

- Individual characteristics: Sex, age, disability status, educational attainment of children who dropped out, academic performance, or child labour status (see Annex K).
- Household characteristics: Educational attainment of parents or household head; language, religion or ethnicity of parents or household head; household wealth quintile; household location (urban/rural); region, state or district of household; number of siblings; orphanhood.
- School characteristics: Distance to school, pupil-teacher ratio, and percentage of qualified teachers.

The data can also be examined for information on employment status, school exposure, academic performance, and the characteristics of schools associated with a student population at high risk of dropping out.

Qualitative data may also be explored to complement disaggregated analysis, in particular where quantitative data are lacking in coverage or detail.

Focusing the disaggregation of data on the most critical and relevant issues for national policies will help when making policy recommendations. If the education system is decentralized and decision-making occurs at the province or district level, it is important to try to provide robust estimates at the sub-national level.

CONSIDERATIONS FOR USING SAMPLE SURVEYS FOR DISAGGREGATED ANALYSIS

Sample surveys are designed to be representative at a particular level of disaggregation. For example, if data are only accurate down to the province level, they should not be further disaggregated by districts within a province.

With sample survey data, pay attention to standard errors and do not draw firm conclusions based on small sample sizes. As a rule of thumb, only data from groups with at least 25 unweighted observations can be considered sufficiently reliable.

The concerns above pertain to sample surveys. Census and administrative data usually cover an entire population and are ideal for disaggregation by subgroup or area.

CLASSIFICATION OF OUT-OF-SCHOOL CHILDREN BY SCHOOL EXPOSURE

Disaggregated data are critical for analysis of out-of-school children by school exposure, part of Dimensions 2 and 3 (see *Section 2.3*). Dropouts or early school leavers can be identified in administrative and household survey data and identified by the level of education attained.

Children who will enter school in the future cannot be directly identified in administrative or household survey data while they are still out of school. It is only possible to assess the probability of future attendance based on available school entry rate data for children of a particular age.

Similarly, children who will never enter school cannot be individually identified in administrative or survey data. The share of children who will never enter school only can be estimated based on an assessment of the probability of future school attendance.

For the purpose of estimating the size of each group of out-of-school children in Dimensions 2 and 3, the UIS has designed a spreadsheet for OOSCI studies that is described in Annex G.[29] The spreadsheet uses probability analysis to calculate the rate and number of children who are likely to enter school in the future and children who are likely to never enter school. The same spreadsheet can be used to measure the distribution of children in the three groups by different characteristics, for example location or household wealth.

The spreadsheet described in Annex G makes it possible to generate data for Core Tables 5 and 8. To use the spreadsheet, it is necessary to provide a minimum set of data from household surveys. For this purpose, Annex H presents code for the Stata statistical package that can be adapted for use with other statistical packages.

DISAGGREGATION BY SEX AND OTHER CHARACTERISTICS

For all indicators, values should at least be presented for (see core and optional tables in *Annex J*):

- Girls
- Boys
- Both genders
- Gender parity index (GPI) – for most indicators but not all.

The GPI provides information on disparity in educational participation between boys and girls. Its calculation is shown in Equation 4.17 at the example of the GPI for the primary ANER. Values of the GPI between 0.97 and 1.03 are usually considered as an indication of gender parity, regardless of the indicator. If the GPI is less than 0.97, girls are at a disadvantage. If the GPI is greater than 1.03, boys are at a disadvantage.

EQUATION 4.17

$$\text{GPI for primary ANER} = \frac{\text{Female primary ANER}}{\text{Male primary ANER}}$$

29 The spreadsheet and other tools are available at the OOSCI website at www.allinschool.org.

The GPI for the primary adjusted net attendance rate (ANAR) is calculated in the same way as the GPI for indicators derived from enrolment data. The GPI can be applied to any sex-disaggregated indicator, including the survival rate.

However, the GPI is not applied to the out-of-school rate, but to its enrolment or attendance indicator counterpart.[30] For example, in the case of Dimension 2, the GPI is calculated for the primary ANER but not for the primary-age out-of-school rate.

In addition to grouping children by levels of school exposure, it is important to disaggregate the data by other characteristics. The core and optional tables in Annex J provide useful ways of disaggregating education data by sex, location, household wealth quintile, ethnicity, language, religion and child labour status. Core Table 1 examines attendance rates. Core Tables 2, 3 and 6 examine the out-of-school population. The primary school age range in these examples is 6 to 11 years old. The lower secondary school age range is 12 to 14 years. These ages must be adapted to the official school ages in the national context.

Other groups of disaggregation such as disability, orphanhood, child marriage, and mother's or primary caretaker's level of education can be added to the analysis if data are available. These tables can be completed with household survey data, or with administrative data if sufficient information on child characteristics is available.

DISAGGREGATED OR PROFILES ANALYSIS OF CHILDREN IN DIMENSIONS 4 AND 5

An important way to understand the profiles of children at risk of dropping out is to identify those who left school and to disaggregate the household survey data for this group of children.

Administrative data provide a source for building profiles of children at risk of dropping out of primary or lower secondary school and identifying the schools they attend. Some examples of disaggregated analysis of schools with children at risk of dropping out are:

- Profiles of schools with the highest dropout rates or lowest transition rates between primary and lower secondary education. The profiles should include analysis by location, pupil-teacher ratio, and percentage of qualified teachers.
- Profiles of schools with the highest rates of overage students, including analysis by location, pupil-teacher ratio, repetition rate, and percentage of qualified teachers, etc.
- Profiles of schools with the highest rates of new entrants with no pre-primary experience, including analysis by location, pupil-teacher ratio, repetition rate and percentage of qualified teachers.

Finally, disaggregated household survey data can be used to compare trends in school participation over time. The data can also be studied with multivariate regression models that can include individual and household characteristics to identify the strongest determinants of school participation. If data are available on supply-side characteristics they can be included. For example, it may be possible to link children's school attendance with information on distance to the nearest school.

30 The reason is that the GPI of the out-of-school rate can take on extreme values as the out-of-school rates approaches zero.

4.5 Step 5: Analyse the flow of children in and out of the education system

Step 5 enhances the findings in Steps 3 and 4 by considering interaction with the education system over time to understand school exclusion. This step looks at the constriction in flows of children through the education system and identifies points in time, or critical milestones, where children are 'lost' from the education system.

Here are some common points in time – points of constriction – that may create or worsen educational exclusion:

- (Non-)entry into school
- Transition between levels of education
- Transition between key grades
- Repetition, which may be more common in Grade 1 or in grades coinciding with national examinations

There are two primary methods to identify exclusion points:

- RETROSPECTIVE ANALYSIS: examine the educational attainment of older children. This method can be used to reconstruct each child's schooling pathway; however, it reflects interaction with the schooling system in the past.[31]
- CURRENT TREND ANALYSIS: examine particular indicators that can be used to identify exclusion points, such as the dropout rate by grade, the repetition rate, and the transition rate from primary to lower secondary education.[32] This also includes age by grade analysis which can examine school enrolment to identify ages or grades when students commonly leave school, or repeat. From this analysis it may be possible to identify patterns of overage enrolment or attendance and how it compounds over time. Such an approach is beneficial because it reflects current patterns, and is more timely.

Disaggregated analysis of the results of either approach listed above may show that different groups of children face different exclusion points. For example, children whose mother tongue is not the language of instruction may face much higher repetition rates in Grade 1, or rural children may have lower transition rates to lower secondary education than urban children. Such dynamic analysis provides insights into the particular moments in the schooling system that merit further analysis.

31 For more discussion of this approach see (UIS and UNICEF, 2014c) and (UIS and UNICEF, 2015).
32 These indicators are described in the UIS Online Glossary at: http://www.uis.unesco.org/Pages/Glossary.aspx.

4.6 Step 6: Identify key profiles of out-of-school children and children at risk of dropping out

A 'profile' is a group of children in one or more of the 5DE with certain shared characteristics. Profiles presented in the OOSCI study are created for a relatively large group of out-of-school children (scale of exclusion) or for a group in which the out-of-school rate is relatively high (severity of exclusion).

Table 5 presents a number of factors for evaluating the importance of each profile that analysts can assess based on their findings. In the table, Column 1 specifies the profile, for example, children with disabilities, or girls living in rural areas. Column 2 specifies the dimensions of exclusion most relevant for this particular profile. Columns 3 and 4 capture the scale and severity of exclusion for each group. For Column 3, enter the number of children in the group and the share of the total out-of-school population represented by this group. In Column 4, depending on whether the profile is primarily linked to out-of-school dimensions, or dimensions related to being in school and at risk, enter the out-of-school rate, or the rate of students in that group at high risk of dropping out.

The results from Step 5 are listed in Column 5. In Column 6, rank profiles in order of importance based on a subjective evaluation of key data and background knowledge concerning each of the profiles.

It is useful to rank the profiles from most important to least important.

The table is intended only to encourage reflection and discussion on the importance of the profiles. It is not intended for publication. The ranking should be validated with experts to ensure that no group is missed. The final decision of which profiles to focus on in the OOSCI report should be based on discussion and consensus among the OOSCI team members.

TABLE 5. IDENTIFYING KEY PROFILES OF OUT-OF-SCHOOL CHILDREN OR CHILDREN AT RISK OF DROPPING OUT

1. Profile	2. Relevant Dimensions of Exclusion					3. Size of the exclusion: - Number in each relevant Dimension of Exclusion - Share of the total number of children in that dimension this profile represents	4. Magnitude of the exclusion: - The out-of-school rate OR the rate of children at high risk of dropping out	5. Key moments where exclusion develops or worsens: - Indicators linked to exit or exclusion from school	6. Ranking of importance
Children with disabilities	**1**	**2**	**3**	**4**	**5**	Estimated to be very high[1] (unknown)	Very high	Most never enter school, 40% primary dropout rate	1
Rural adolescent girls	1	2	**3**	4	**5**	5,133 to 7,887 in D3 (10 - 15 %)[2]	12% in D3	50% transition rate from lower to upper secondary	2
Children in region x	**1**	**2**	3	4	5	3,141 in D1, 1,500 in D2 (3%, and 4% respectively)	30% in D1 20% in D2	No pre-primary education, 60% children in D2 enter school late	3
etc									

Notes: (1) Estimated based on x, y and z, although no (reliable) data are available at the time of publication. (2) Lower estimate based on administrative data, upper estimate based on MICS household survey data.

PROFILES OF CHILDREN WITHOUT DATA

It is crucial to consider profiles of children for which reliable data are not available, but which, based on other evidence, may represent a large or highly excluded group, such as children with disabilities. For profiles on these groups, NGO reports or qualitative studies may be required.

4.7 Step 7: Document data gaps and limitations

Every OOSCI study should contain a section that outlines data sources examined, the rationale for using those sources and a discussion of the data limitations and advice on the interpretation of indicators.

THE DATA SOURCES SECTION

Some gaps and limitations can be identified in Steps 1 and 2 and others in Steps 3, 4 and 5.

The discussion of data gaps and limitations should include:

- Which data sources were investigated for use in the OOSCI study?
- What criteria were used to assess the quality and suitability?
- For what reasons did the team choose the specific administrative and household survey data sources?
- If there are differences between indicator estimates from different sources, which methods were used to minimize these differences?
- What accounts for the different indicator estimates?
- Are there any important gaps or cautions for interpretation of any indicators in the analysis that follows?

In addition, the end of the chapter should present specific recommendations on improving the availability and quality of data on out-of-school children and children at risk of dropping out. Particular attention should be paid to improving data at different levels of decision-making including national, province, district and school.

4.8 Step 8: Develop a story around profiles of out-of-school children and children at risk of dropping out

The chapter that results from the methods outlined in Chapter 4 should tell a cohesive story about the children in the 5DE by presenting profiles of excluded children and children at risk of exclusion. By the end of the chapter, the characteristics of the children in each profile, who they are and where they live, and the points in the education system where exclusion begins or worsens should be clear to the reader. This chapter should not go into detail about why these children are out of school – this will be addressed in the barriers and policy chapter – but focus on presenting a clear, persuasive and comprehensive narrative.

BOX 2. OUTLINE OF CHAPTER 2

CHAPTER 2. PROFILES OF EXCLUDED CHILDREN

Introduction
Data gaps and limitations
Five Dimensions of Exclusion:
- Children not in school of pre-primary age: Dimension 1
- Out-of-school children of primary and lower secondary age: Dimensions 2 and 3
- Children in primary and lower secondary school at risk of dropping out: Dimensions 4 and 5

Key profiles of excluded children:
- Profile 1
- Profile 2

Analytical summary

STRUCTURE OF THE CHAPTER

Box 2 outlines the contents and sections of the chapter. The numbers assigned to each profile should be replaced with words that describe the respective profile. The profiles should be presented in descending order of importance.

The introduction describes the contents of the chapter, presents the main findings and provides the context through the presentation of time series data for key indicators. It may be useful to situate the country in the context of the region or neighbouring countries with the help of internationally comparable data.

The data gaps and limitations section presents the findings from Step 7 and provides the reader with considerations for the interpretation of any indicators or profiles presented in the analysis.

The section on the Five Dimensions of Exclusion should present a summary of the key indicators for the rate and number of children in each of the 5DE, including school exposure of children in Dimensions 2 and 3. The team can decide which core and optional tables to include in the main text. Omitted tables should be presented in the report annex. This section presents the most pertinent information for the most important groups of children in the 5DE. The section can be relatively short, providing a brief overview of the key national or regional trends and a brief analysis of the data.

The key profiles section presents the majority of the analysis in the chapter, including data linked to key profiles in each dimension. It highlights results from relevant indicators, disaggregated analyses and qualitative data. Profiles should be

presented by order of importance, such as: 'children involved in child labour', 'children from ethnic minorities', 'children with disabilities' or 'children with multiple disadvantages'. The latter can be subdivided into specific profiles, such as: 'rural adolescent girls', 'poor children from ethnic group X', for example.

The analytical summary provides a concise assessment of the preceding sections, including the discussion of data gaps and limitations, and summarizes the key profiles of excluded children to be explored in the barriers and policies chapter. It should also make reference to the recommendations for the improvement of the coverage and quality of data.

GUIDELINES FOR PRESENTING STATISTICAL DATA

Presentation of information should be comprehensive, convincing and engaging. When data are presented, the following needs to be clarified:

1. Why are the data included? If there is no good reason, they should be excluded. Tables and figures can be trimmed to present only what is relevant, while the full data tables can be included in the annexes.

2. What are the key messages that the data should convey? The data should be easy to interpret and should emphasize key messages. Elements that might distract from the key messages may be removed, but not at the risk of making the presentation misleading. For example, data that contradict the case should be included and irrelevant data removed. A further suggestion is to convey the key message in the title of each figure and table in the main text.

3. Which type of analysis needs to be applied to understand and interpret the data? The presentation format that best supports this type of analysis should be chosen.

The following questions can help determine the format and design in which the data will be presented:

- Which type of analysis needs to be conducted to interpret the data and the key messages?
- Which presentation format best suits this type of analysis?
- The presentation format should convey one or several key messages in the data – what are they? What is the major story revealed by the data?
- How can the design be modified to best convey the key messages? For example, the highest or lowest values can be highlighted.
- If available, which levels of disaggregation provide the best insights into the data? For example, presenting a statistical map at district level might reveal patterns that are not apparent in a regional map.
- Are there several categories of related data that can be analysed together? In this case, they could be combined into one presentation format, or separated into several charts or graphs.
- Should information be presented both as a percentage and as absolute numbers, for example the out-of-school rate and the number of out-of-school children of primary age?
- Presenting information in one way or another can change the message, so in some cases it can be useful to present more than one way.

The following is a list of common ways in which data can be analysed, with corresponding suggested presentation formats.

- Straightforward comparisons of data: bar chart
- Analysis of data with several dimensions or categories: table, dot plot
- Relationships between two or more indicators: scatter plot, bubble chart
- Analysis of regional disparities: thematic map
- Comparisons over time: time series or line graph

This is by no means an exhaustive list of types of analysis or of the many types of presentation formats or visualizations that can be used. Remember that the target audience may not always be very familiar with less commonly used data visualizations such as parallel coordinates, box plots and tree maps. Some guidelines on how

to produce graphs to better explore and analyse data are listed below.

- Schwabish, Jonathan A. 2014. "An Economist's Guide to Visualizing Data." *Journal of Economic Perspectives* 28 (1): 209–34. https://www.aeaweb.org/articles.php?doi=10.1257/jep.28.1.209.
- Tufte, Edward. 2001. *The Visual Display of Quantitative Information*. 2nd ed. Cheshire, CT: Graphics Press.

GRAPHS OR TABLES?

Here are some guidelines for determining how to present data

TABLES

Tables are generally best suited for looking up figures or for comparing a very small set of numbers. Large tables in particular should almost always be avoided in the body of a report and should generally be placed in the annex, except if data lookup is the purpose of the report or report section. An exception is when there are several categories of related data, which provide important information and cannot be easily or clearly presented in visual form (see *Table 6*).

TABLE 6. DISTRIBUTION AND INCIDENCE OF WORKING CHILDREN BY REGION IN AZERBAIJAN (2005)

REGION	PROPORTION OF ALL CHILDREN IN AZERBAIJAN (%)	PROPORTION OF ALL WORKING CHILDREN IN AZERBAIJAN (%)	INCIDENCE OF WORKING CHILDREN IN REGION (%)	PROPORTION OF CHILDREN IN RURAL AREAS IN REGION (%)
Absheron	4.9	0.6	1.0	4.8
Aran	**25.6**	**27.2**	8.1	67.5
Baku	**22.8**	7.8	2.5	0.0
Daghligh Shirvan	3.3	1.5	3.4	71.6
Ganja Gazakh	13.4	14.5	8.1	60.1
Guba Khachmaz	5.3	14.0	**19.7**	72.8
Lankaran	10.6	**19.8**	14.0	77.5
Naxcivan	4.5	0.9	1.4	71.6
Shaki Zaqatala	6.5	1.9	2.2	**80.0**
Yukhari Garabakh	3.0	11.2	**28.2**	**91.8**
TOTAL	**100.0**	**100.0**	**7.5**	**51.2**

Note: The two regions with the highest values in each column are highlighted.

GRAPHS

Graphs can be used to visualise disparities or correlations between different groups or different indicators, or trends over time. The chart type should be appropriate for the indicator and message. All elements in a graph (legend, axes, unit of measurement) should be clearly labelled, while clutter and information overload should be avoided. When choosing colours, it is helpful to consider readers who may be colour blind or who may print documents in black and white.

For straightforward comparisons of data

- Bar or column charts (regular or stacked).
- Can be used for:
  - Categories of out-of-school children by school exposure, sex and location
  - Reasons why children are out of school by percentage of respondents
  - Number of children in a Dimension of Exclusion by single year of age

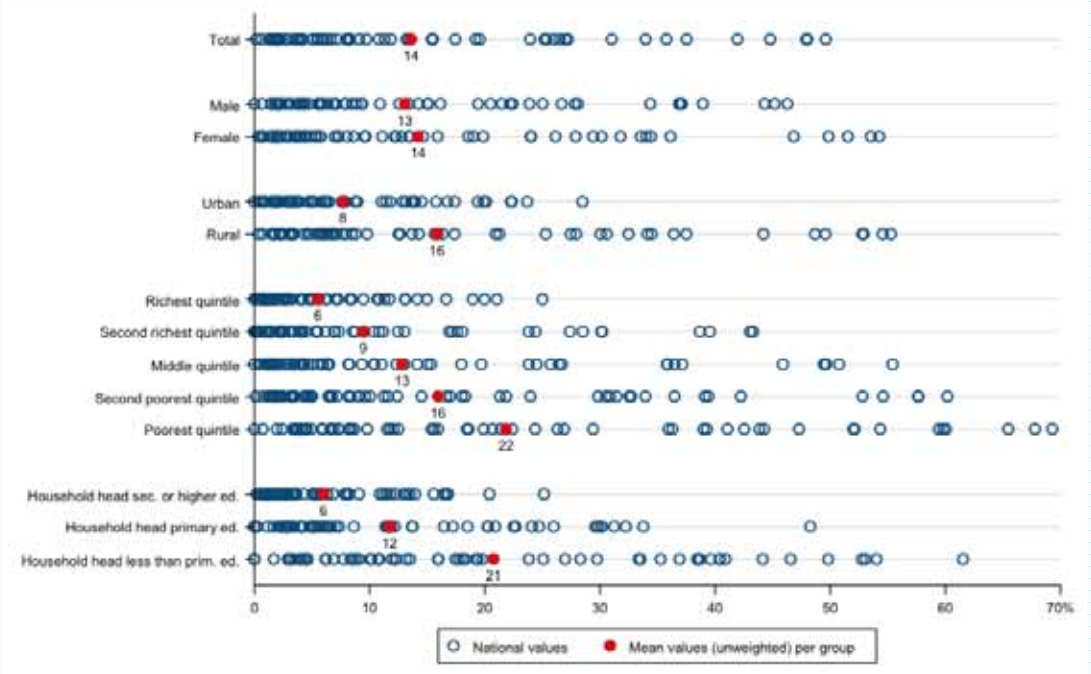
For data with several dimensions or categories

- Dot plot or table
- Notes: A dot plot displays multiple points on one axis and categories or cross-classifications along the other axis. It is a good alternative to a table for displaying multiple categories or cross-classifications of data. Data values can be more easily compared in a dot plot than in a table.
- Can be used for:
  - Distribution and incidence of working children by region (see *Table 6*)
  - Out-of-school rate by country, sex, location, income group and other characteristics (see *Figure 5*)

For relationships between two or more indicators

- Scatter plot or bubble chart.
- Can be used for:
  - Comparison by region of child labour rates (y-axis) and the proportion of children

FIGURE 5. OUT-OF-SCHOOL RATE FOR CHILDREN OF PRIMARY SCHOOL AGE, BY SEX, LOCATION, HOUSEHOLD WEALTH AND EDUCATION OF THE HOUSEHOLD HEAD, VARIOUS YEARS



living in rural areas for each region (x-axis)
- Comparison by country of GNP per capita (x-axis) and the rate of out-of-school children of primary school age (y-axis), with the bubble size reflecting the number of out-of-school children

For regional disparities

- Thematic map such as a proportional symbol map or choropleth map.
- Notes: In a choropleth map (see *Figure 6*), areas (e.g. districts or regions) are coloured according to their statistical value. In general, the smaller the administrative division the better, as this provides more detail, whereas maps with data only for larger regions can conceal variations between smaller sub-regions in a country.
- Can be used for:
  - Percentage of out-of-school children by region
  - Percentage of working children by region (see *Figure 6*)

Comparisons over time

- Time series or line graph.
- Can be used for:
  - Rate of out-of-school children over time
  - School enrolment over time, showing he relationship of a particular policy or historical event, such as school fee abolition or a conflict.

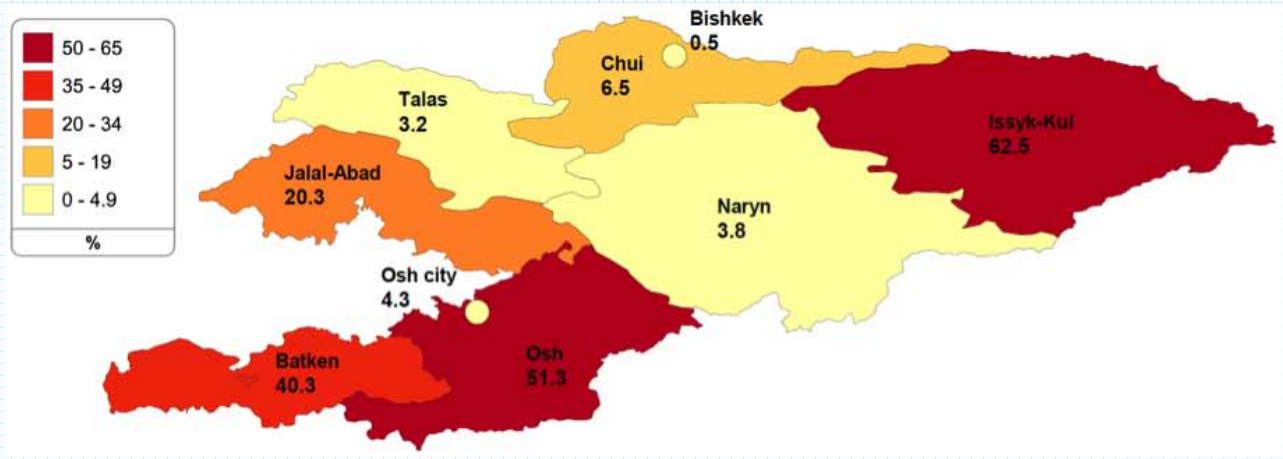
Software for data analysis and production of tables and graphs

The free DevInfo software by UNICEF, available at http://devinfo.org, can be used to produce many types of graphs. For examples see the gallery at http://devinfo.org/libraries/aspx/Gallery.aspx.

The free UNESCO eAtlas of Out-of-School Children (http://tellmaps.com/uis/oosc/) can be used to create maps and graphs from UIS data.

LibreOffice, a free and open source office suite that is available in many languages, can be downloaded from http://www.libreoffice.org.

FIGURE 6. PERCENTAGE OF WORKING CHILDREN AGE 5 TO 14 YEARS BY REGION, KYRGYZSTAN (2005)



Chapter 5
Barriers and Policies Analysis

Topics Covered in Chapter 5

Vital guidance for barrier and policy analysis, including:

- The OOSCI framework for identifying barriers and policies
- Linking the profiles of out-of-school children to the most pressing barriers to education
- Developing and prioritizing policy recommendations
- Structure and content of the OOSCI study chapter on barriers and policies

Chapter 5 describes a systematic approach for using the profiles of out-of-school children and children at risk of dropping out to pinpoint the factors that exclude them from education and make recommendations to eliminate or reduce these barriers. It begins with an introduction to the analysis framework and the method for linking profiles to the most critical barriers. The chapter includes guidance for choosing the policies and associated recommendations, and concludes with suggestions for writing and structuring the 'barriers and policies' chapter in an OOSCI study.

5.1 Framework for Identifying Barriers and Policies

The statistical analysis at the beginning of an OOSCI study develops the profiles of children who are out of school or at risk of exclusion and identifies the moments in the schooling pathway where exclusion develops and worsens. The next step in the study is to establish what is keeping children out of school or placing them at risk of dropping out. Once these barriers to education are identified and assessed, the study proceeds to analyse existing policies and then recommends options for reducing or eliminating the barriers.

The identification and analysis of both barriers and policies starts with a desk review of evidence on the factors that deter children from going to school. Much of this evidence will be familiar to the study team. But the review should also explore other sources related to both the study country and other countries, including academic studies; previous OOSCI reports and findings from field research and pilot schemes; government policy papers and regulations; donor reports; and interviews with experts, community members, teachers and students.

To ensure that all relevant barriers have been identified, the results of the desk review should be mapped against the following framework, based on the Monitoring Results for Equity System (MoRES).[33]

I. ENABLING ENVIRONMENT
- **1.** Social norms
- **2.** Policy/legal framework
- **3.** Budget/expenditure
- **4.** Institutional management/coordination

II. SUPPLY
- **5.** Availability of essential commodities/ inputs
- **6.** Availability of adequately staffed services, facilities and information

III. DEMAND
- **7.** Financial access
- **8.** Social and cultural practices and beliefs
- **9.** Continuity of use

IV. QUALITY
- **10.** Quality of services and goods

An example for a matrix for mapping barriers to the MoRES framework is shown in Table 7. The actual barriers will be identified according to the country context. Further research may be necessary if this mapping reveals gaps in identifying the barriers. The matrix is a tool that is not included in the final study.

33 See, for example: United Nations Children's Fund, 'Monitoring Results for Equity System', *Briefing Note*, UNICEF, New York, 1 February 2013; open PDF at www.unicef.org/about/employ/files/MoRES_Briefing_Note.pdf.

TABLE 7. EXAMPLE OF A MATRIX FOR MAPPING THE BARRIERS TO EDUCATION

DOMAIN	CATEGORY	EXAMPLES OF POTENTIAL BARRIERS
Enabling environment	Legislation/policy	- Lack of political commitment to inclusion - Laws and policies that discriminate against minorities - Restrictive administrative regulations, such as requiring a birth certificate to enrol in school
	Budget/ expenditure	- Inequitable allocation of resources - Lack of costed strategies to reach the poor - Wastage of resources - Funding gaps
	Management/ coordination	- Lack of effective delegation and devolution - Lack of transparency and accountability mechanisms - Weak monitoring mechanisms - Lack of technical capacity - Lack of mechanisms for inter-sectoral coordination - Lack of effective participatory mechanisms at local levels - Education system collapse during emergencies
Supply	Availability of essential inputs	- Inadequate number of teachers per class - Lack of female teachers - Lack of schools or learning spaces during emergencies - Inadequate provision of textbooks and learning materials - No textbooks in mother tongue of children
	Access to adequate staffed services, facilities and information	- Lack of water and sanitation in schools - Long distance to schools - Lack of transport - Inaccessible environment and lack of support services for children with disabilities - Unsafe schools
Demand	Financial access[34]	School fees and other out-of-pocket expenditures for education - Opportunity costs and support for household subsistence - Economic repercussions of emergencies
	Social and cultural practices and beliefs	- Negative individual emotional experiences of children with schooling and within home/community - Lack of benefits of education due to low rate of labour market return - Pregnancy and marriage reduce girls' participation - Orphans/fostered children may be disadvantaged - Household choices for sending children to school, with different preferences for boys and girls
	Social norms	- Social rules and pressures that marginalize certain groups - Discrimination against migrant groups
	Timing and continuity of use	- Poor attendance - Overage
Quality	Quality	- Lack of relevance of curricula, with weak links to livelihoods and jobs - Violence in schools, including bullying, beating, psychological stress, corporal punishment, sexual harassment - Poor teacher training - Lack of qualified teachers - Teacher absenteeism, loss of time on task - Inadequate pedagogy - Teaching in non-mother tongue - Lack of integration of local values/cultures - Ineffective evaluation approaches - Poor monitoring of attendance and learning progress - Inadequate assistance to children with special needs - Low achievers pushed out or fall out

34 Financial access is defined as "Ability to afford the direct and indirect costs of using services and adopting practices" in United Nations Children's Fund, *Pursuing Equity in Practice: A compendium of country case studies on the Monitoring Results for Equity (MoRES) System*, UNICEF, New York, 2015 p. 8.

5.2 Linking Profiles to Critical Barriers

The profiles and barriers matrix in Table 8 is used to link the key profiles of out-of-school children and children at risk of exclusion with the corresponding barriers to education. It is recommended that profiles are listed in order of importance, by the number of children in each group as determined in Chapter 4, Step 6. Some barriers will appear more than once because they affect more than one profile. Two example profiles illustrate how the table should be completed.[35]

TABLE 8. EXAMPLES OF INITIAL LINKS BETWEEN PROFILES AND BARRIERS

PROFILE	BARRIER	DOMAIN
Rural adolescent girls	- Schools in rural areas are poorly resourced	Enabling environment
	- Lack of female teachers - Lack of water and sanitation in schools	Supply
	- Cultural bias against educating girls - Girls are excluded from school because of marriage or pregnancy - Cost of education	Demand
Children with disabilities	- Regulations prevent children with disabilities from attending general schools	Enabling environment
	- Inaccessible school buildings	Supply
	- Social pressure against children with learning difficulties in classes with other children - Cost of education	Demand
	- Teachers not trained in inclusive education approaches and pedagogy	Quality
Additional profile to be determined	Barrier 1	
	Barrier 2	
	Barrier 3, etc.	

35 If desired, the profile column can also include information on the point in the schooling trajectory where that group faces exclusion along the schooling pathway (results from the analysis of flows in Chapter 4, Step 5). For example, Table 8 could read "Rural adolescent girls who do not transition from primary and secondary education" in the Profile column. Specifying the profile of excluded children in this way would mean, by extension, that the identification of barriers would also be specific to the causes of exclusion of that group in that point in the schooling pathway.

The next step is identifying the most critical barriers – those with the greatest impact on keeping children out of school. They affect the largest number of children, the widest range of profiles, or have the most severe impact on the children affected. The identification of the most critical barriers should therefore be based on the numbers of children in the key profiles developed in Chapter 4 or, if these are not known, of the best estimates available.

Once critical barriers are identified, they should be arranged in order of priority. These barriers are then entered in the matrix shown in Table 9, together with the profiles affected and a description of the number or proportion of children involved.

TABLE 9. EXAMPLE OF A MATRIX FOR DETERMINING CRITICAL BARRIERS

CRITICAL BARRIER	PROFILES AFFECTED (Example profiles with examples of detail of information)
Cost of education	Children in rural areas: (For example: 7.5 million children of primary school age or 75% of the age cohort live in rural areas)
	Girls (For example: 5 million children of primary school age are girls.)
	Children with disabilities (For example: There are an estimated 1 million children with disabilities)
Additional barriers to be determined	Profile 1
	Profile 2
	Profile 3, etc.

5.3 Developing the Policy Recommendations

An assessment is now conducted on the existing policies that affect each of the critical barriers identified in the previous matrix. This should encompass the formal stated policies or strategies, procedures and regulations, and the effectiveness with which they have been implemented. For example, if the cost of education has been identified as a critical barrier, the assessment would entail a review of formal government policy on education financing, and an appraisal of the procedures and regulations that are intended to implement it.

The critical barriers and the assessment of existing policies are brought together in Table 10. The first two columns are taken directly from the matrix in Table 9, with the highest priority barriers listed first. The final two columns summarize existing policies and their effectiveness.

TABLE 10. EXAMPLE OF LINKS BETWEEN CRITICAL BARRIERS AND EXISTING POLICIES

CRITICAL BARRIER	PROFILES AFFECTED	EXISTING POLICIES	POLICY EFFECTIVENESS
Cost of education	- Children in rural areas - Girls - Children with disabilities	Fee-free primary education	Policy implemented effectively but does not cover indirect costs such as uniforms, transport, admission fees, exam fees Poor families cannot afford indirect costs of education
Additional barriers to be determined	Profile 1 Profile 2 Profile 3, etc.		

The OOSCI study moves on to explore options for changes in government policy that could eliminate or significantly diminish the critical barriers. Policies and strategies that should be considered are listed below (for specific policies relating to children with disabilities, see *Annex L*).

- ENABLING ENVIRONMENT encompasses legislation and government policies, budget allocations and expenditure, and management and coordination within the education sector. Examples of policy proposals include:

  Social norms – communication campaigns to address negative social norms.

  Legislation and policy – redistributive policies that benefit the poor, including social protection measures; equitable regulatory frameworks for non-public provision of education; accreditation of multiple pathways to learning; removing legislative and financial barriers to school entry, such as requiring a birth certificate and imposing penalties for late school registration.

  Budget and expenditure – increased budgetary allocations to education (in terms of both total government expenditure and in relation to other development sectors) and within education (education levels, teacher salaries, capital expenditures, other non-salary expenditures), including in times of economic stress; strategies to ensure that resources reach the poor, including within resource-constrained environments.

  Management and coordination – development of institutional arrangements and technical capacity with the ministry of education to address the needs of excluded children; regulation and monitoring mechanisms affecting children's timely access and transitions; capacities in policy analysis and building effective data and monitoring systems; local school grants to support these capacities.

- SUPPLY includes the availability of essential inputs, and access to adequate staffed services, facilities and information. Examples of policy proposals include:

  School infrastructure – improving school facilities; separate water and sanitation facilities for girls and boys; adaptations of school infrastructure for children with disabilities.

  Teacher supply – increasing teacher supply and female participation in teaching; reduced class size; pre-service and in-service teacher training in knowledge and skills for assisting students at risk; development of support structures to teachers for addressing the needs of students at risk.

Textbooks and learning materials – review of curriculum for inclusive teaching and learning; encompassing local content in the curriculum; provision of materials that stimulate learning, including textbooks in minority languages.

- DEMAND encompasses financial access[36], social and cultural practices and beliefs, and the timing and continuity. Examples of policy proposals include:

  Economic – abolition or reduction of school fees; scholarships, and subsidies to purchase uniforms and textbooks; cross-sector proposals such as cash transfers, school feeding or take-home food rations, and provision of micronutrient supplements.

  Sociocultural – community mobilization and strategies aimed at empowerment and participation, such as awareness raising on sex issues; initiatives to address stigmatizing attitudes towards marginalized children in the school and community, including partnerships with religious and civil society organizations; removal of discriminatory legislation or policies affecting service provision or employment.

  Timing and continuity of use – community mobilization and strategies aimed at raising awareness about the value of education and the importance of sending children to school.

- QUALITY includes policies that cover:

  Schools – regulations on school infrastructure, including construction of accessible classrooms.

  Teachers – pre-service and in-service teacher training that includes approaches to inclusive education; mechanisms to support teachers in environments with limited resources.

  School and classroom management, organizational and pedagogic characteristics – interactive and participatory pedagogy; teaching in mother tongue; monitoring of student access and learning; addressing violence in schools.

  School support to vulnerable children – availability of support staff for children with disabilities, children with special learning needs, vulnerable children and in general children at greater risk of dropout (such as school psychologist, school doctor, speech therapist); regular monitoring of children (well-being, achievement, misbehaviour, absenteeism); coordination with external supporting bodies (such as social services, NGOs).

The policy options are then refined into a set of feasible proposals that would make a substantial and sustainable reduction in the number of children out of school. This can be conducted in a number of ways, for example, by comparing successful implementation of similar changes in similar countries, in conjunction with cost-benefit analysis of the changes.

Another approach is to use modelling tools, for example, the Simulations for Equity in Education (SEE) tool developed by UNICEF and the World Bank. SEE is designed to help countries identify cost-effective strategies for reaching children who are excluded from or underserved by education systems. The centrepiece of this tool is an Excel model that projects both the costs of interventions to reach different groups of excluded children and the improvements in school outcomes as a result of those interventions.[37]

36 Financial access is defined as "Ability to afford the direct and indirect costs of using services and adopting practices" in United Nations Children's Fund, *Pursuing Equity in Practice: A compendium of country case studies on the Monitoring Results for Equity (MoRES) System*, UNICEF, New York, 2015 p. 8.
37 SEE tools and key publications are available at: www.unicef.org/education/bege_SEE.html.

The Simulations for Equity in Education (SEE) project was launched in 2011. The tool can be used to project the cost of interventions aimed at reaching excluded children and measure the potential improvements in educational outcomes that would result from the interventions.

The tool uses a life-cycle approach to calculate its projections, which allows for flexibility in the outcomes measured. As a result, SEE can track many indicators, be integrated into multiple initiatives and, though geared for primary education, can be retrofitted to measure pre-primary and secondary schooling.

SEE can:

- Identify risk groups
- Identify bottlenecks
- Point to cost-effective interventions
- Show how to target resources for maximum benefit
- Be used to advocate for policy solutions.

The output of this exercise should be a limited number of recommendations for changes in policy that would be most effective in eliminating or diminishing the barriers to education. These recommendations should be feasible in both practical and financial terms, so that they can be implemented and sustained without open-ended external support.

The recommendations for policy change are now entered into the barriers and policies matrix in Table 11, along with the critical barriers, the key profiles of out-of-school children that are affected, the most relevant existing policies, and a summary of the effectiveness of these policies. The first four columns of this matrix are taken directly from the matrix in Table 10.

TABLE 11. THE COMPLETE MATRIX: CRITICAL BARRIERS, PROFILES, EXISTING POLICIES, POLICY EFFECTIVENESS AND RECOMMENDATIONS

Critical barrier	Profiles affected	Existing policies	Policy effectiveness	Policy recommendations
Cost of education	- Children in rural areas - Girls - Children with disabilities	Fee-free primary education	Poor families cannot afford indirect costs of education	Increase funding for schools in poor rural areas by revising the formula for capitation grants.
Additional barriers to be determined	Profile 1 Profile 2 Profile 3, etc.			

5.4 Structuring the Barriers and Policies Chapter

Completing the matrix illustrated in Table 11 provides the structure for Chapter 3 of the OOSCI study. This chapter brings all the elements – profiles, corresponding barriers, and policies – together, as shown in Table 12.

TABLE 12. STRUCTURE OF THE BARRIERS AND POLICIES CHAPTER

CHAPTER 3 OF THE OOSCI STUDY
Introduction
Barrier 1: Costs of education - Introduction - Existing policies (e.g., abolish school fees) - Recommended policies (e.g., cash transfers, scholarships, free textbooks)
Barrier 2: Lack of public transportation - Introduction - Profiles affected (e.g., girls living in remote areas, children with disabilities) - Existing policies (e.g., transportation vouchers) - Recommended policies (e.g., provide transportation for children in remote areas, make school buses accessible to children with disabilities)
Barriers to evidence-based policy
Analytical summary
Suggested # of pages = 30

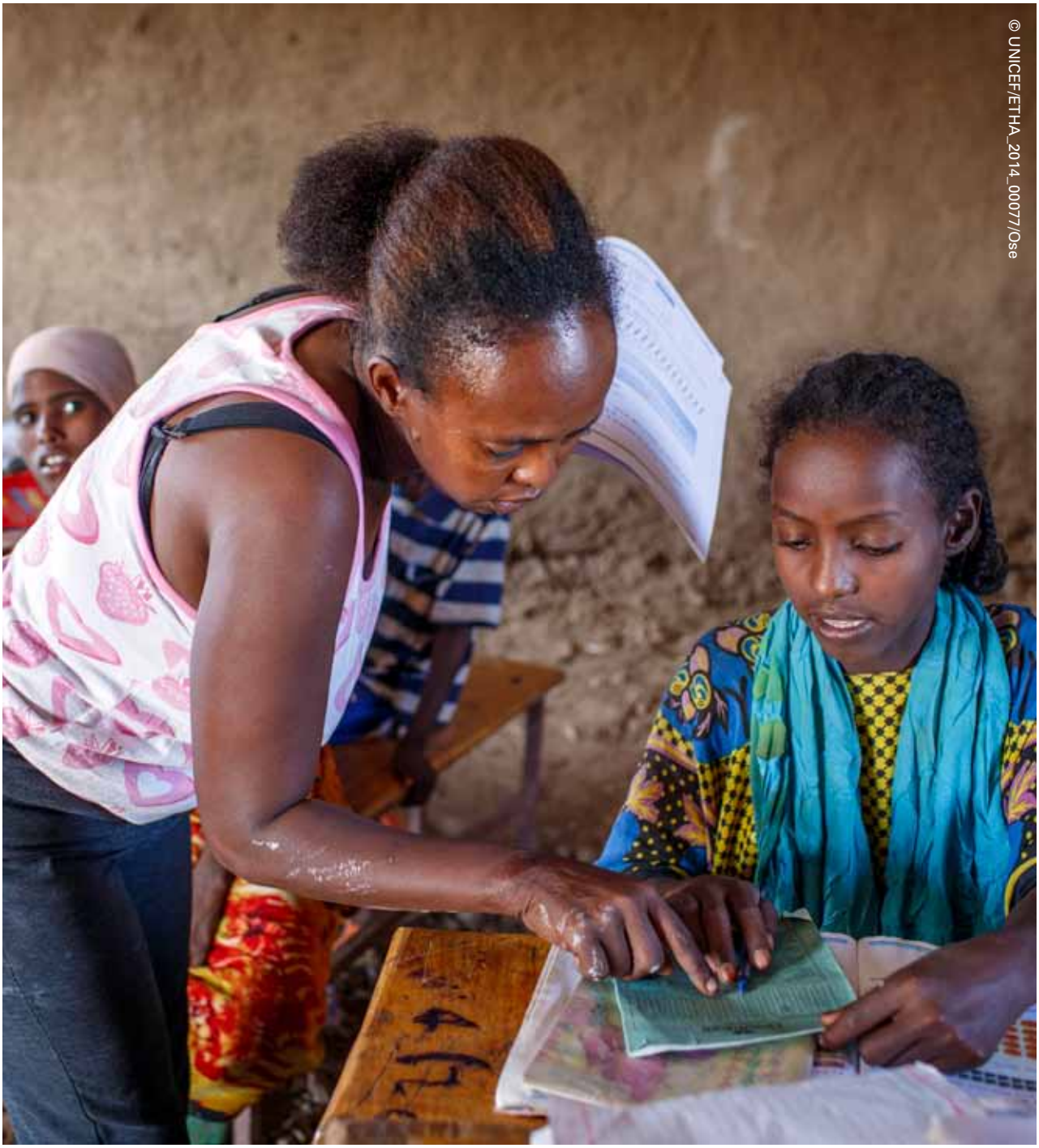
Recognizing that children's exclusion from education is caused by multiple and interlinked factors, the OOSCI methodology aims to develop complex profiles of children in each dimension of exclusion. Therefore, the analysis presented in the barriers and policies chapter should encompass socio-economic characteristics such as sex, household wealth, and ethnicity – and also use data that capture a wider range of factors.

While analysis of quantitative data will be dominant, the analysis of qualitative data can be a powerful complement and is encouraged. Qualitative data can be particularly useful for analysis of groups of children who are frequently left out during routine data collection, for example, children living and working on the street, children with disabilities, or those who are refugees or internally displaced (see box 1 in Step 2 of *Chapter 4*).

Because recommendations for new or revised policies are based on the corresponding barriers they address, the barriers and policies are analysed in the same chapter and are clearly linked through the chapter structure. It is also important that this chapter is based on the findings from Chapter 4.

Linking the barriers and policies to the Five Dimensions of Exclusion can be challenging. Discussing each of the dimensions separately as a subsection would create an unnecessarily complex chapter structure. Authors are encouraged to devise ways to navigate the complexities. As an example, the regional OOSCI report for Latin America and the Caribbean devised a colour-coding system. Another solution would be to link the barriers and policies to the MoRES framework, indicating impact in the domains of enabling environment, supply, demand and quality.

38 See: UNESCO Institute for Statistics and United Nations Children's Fund, 'Chapter 2. Barriers and bottlenecks that generate or worsen exclusion', in *Finishing School: A right for children's development – A joint effort, Executive Summary*, UNICEF Regional Office for Latin America and the Caribbean, Panama, 2012, pp. 24–34; available from www.uis.unesco.org/Education/Pages/out-of-school-children.aspx



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Annexes

© UNICEF/NYHQ2013-1492/Pirozzi

Annex A.
External resources

Out-of-School Children Initiative (OOSCI)

UNICEF and UIS, 'All In School: the Out-of- School Children Initiative', www.allinschool.org

UIS, 'Out-of-School Children', www.uis.unesco.org/Education/Pages/out-of-school-children.aspx

UNICEF, 'Out-of-School Children Initiative', www.unicef.org/education/bege_61659.html

UIS Data Centre – education data by country and region, www.uis.unesco.org/datacentre/pages/default.aspx

Household survey data and reports by country:

Demographic and Health Surveys (DHS), http://dhsprogram.com/What-We-Do/survey-search.cfm?pgtype=main&SrvyTp=country

Multiple Indicator Cluster Surveys (MICS), www.childinfo.org/mics4_surveys.html

OOSCI studies and related documents:

United Nations Children's Fund and UNCESCO Institute for Statistics, Fixing the Broken Promise: Findings from the Global Initiative on Out-of-School Children, UNICEF and UIS, Montreal, January 2015.

Out-of-School Children Initiative flyer, 2014, www.unicef.org/education/files/UNICEF_UIS_OOSCI_flyer.pdf

United Nations Children's Fund, 'Community EMIS', in *CEE/CIS Regional Framework for Monitoring Out of School Children and Adolescents*, UNICEF, Geneva, 2014.

Report and Methodological Guidance Note – MENA OOSCI Methodology Workshop, Istanbul, 27–31 May 2013 < Workshop documents should include, per original draft footnote #50, Keith Lewin's presentation>, UNICEF and UIS, 2013.

Testot-Ferry, Phillippe, and Frank van Cappelle, 'Regional Framework for Monitoring Out of School Children & Children at Risk of Dropping Out', Presentation at Annual Conference of Comparative International Education Societies, Toronto, 13 March 2014. UNICEF CEE/CIS, 2014; available at http://education-equity.org/?page_id=2600

UNESCO Institute for Statistics (UIS) and UNICEF, *Children out of school: Measuring exclusion from primary education*, UIS and UNICEF, Montreal and New York, 2005.

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United Nations Children's Fund, *All Children in School by 2015: Global initiative on out-of-school children - Eastern and Southern Africa Regional Report*, UNICEF Regional Office for Eastern and Southern Africa, Nairobi, 2013.

United Nations Children's Fund, *All Children in School by 2015: Global initiative on out-of-school children - South Asia Regional Study, Covering Bangladesh, India, Pakistan and Sri Lanka*, UNICEF Regional Office for South Asia, Kathmandu, 2014.

United Nations Children's Fund, *All Children in School by 2015: Global initiative on out-of-school children - West and Central Africa Regional Study, UNICEF Regional Office for West and Central Africa*, Dakar, 2014.

NIGERIA COUNTRY STUDY
http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CB4QFjAA&url=http%3A%2F%2Fwww.uis.unesco.org%2FLibrary%2FDocuments%2Fout-of-school-children-nigeria-country-study-2012-en.pdf&ei=LdpKVJXHOefjsASA6IDwDQ&usg=AFQjCNEw1U9HhKOpISMHLt1J9oVa88KkRw&bvm=bv.77880786,d.cWc

DRC OOSC national study
http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CB4QFjAA&url=http%3A%2F%2Fwww.unicef.org%2Feducation%2Ffiles%2FDRC_OOSCI_Full_Report_(En).pdf&ei=QedKVKe7E5DGsQTb2IKIDg&usg=AFQjCNFpTSE7kJkwOrfAXou4hM_ujmgrKA&bvm=bv.77880786,d.cWc

Passarella, D. and Kit, I., *Coordinating Communication Plans with the Out-of-School Children Initiative in Latin America and the Caribbean*, Asociación Civil Educación Para Todos, 2012.

Understanding Children's Work (UCW)

International Labour Organization, UNICEF and the World Bank, inter-agency research cooperation initiative, www.ucw-project.org

UCW Country Reports, www.ucw-project.org/Pages/country_reports.aspx
Detailed analyses of child labour in specific country contexts. Thematic background research papers by counterparts are also posted.

'Info by Country',
www.ucw-project.org/default.aspx
Access to child labour indicators, survey details, UCW research reports, bibliographic references, impact evaluations and UCW events relating to the selected country.

UNESCO Institute for Statistics (UIS)

International Standard Classification of Education: ISCED 2011, Montreal, 2012; open PDF at www.uis.unesco.org/Education/Documents/isced-2011-en.pdf

ISCED 1997, 2006 re-edition;
open PDF at www.uis.unesco.org/Library/Documents/isced97-en.pdf

ISCED Mappings, by country,
www.uis.unesco.org/Education/ISCEDMappings/Pages/default.aspx

Global Education Digest: Comparing education statistics across the world
2012 – Opportunities Lost: The impact of grade repetition and early school leaving
2011 – Focus on Secondary Education: The next great challenge
2010 – Education and Gender: Between promise and progress; Available at www.uis.unesco.org/Education/Pages/global-education-digest.aspx
2008 – In particular, 'The UIS Data Collection in Brief', pp. 9–19; open PDF at http://unesdoc.unesco.org/images/0017/001787/178740e.pdf

A View Inside Primary Schools: A World Education Indicators (WEI) cross-national study, Montreal, 2008; open PDF at www.uis.unesco.org/Library/Documents/wei08-en.pdf

UNESCO Institute for Statistics, 'Measuring educational participation: Analysis of data quality and methodology based on ten studies', Technical Paper no. 4, UIS, Montreal, 2010.

UNESCO Institute for Statistics. *Out-of-school adolescents*. UIS, Montreal, 2010.

UNESCO Institute for Statistics (UIS) and UNESCO Regional Bureau for Education in Africa. *Assessing education data quality in the Southern African development community (SADC): A synthesis of seven country assessments*, UNESCO, Windhoek, 2010.

UNESCO Institute for Statistics, United States Agency for International Development, ORC Macro, United Nations Children's Fund and Network on Schooling in Africa, *Guide to the analysis and use of household survey and census education data* UIS, USAID, ORC Macro, UNICEF and FASAF, Montreal, 2004

United Nations Children's Fund (UNICEF)

ChildInfo, http://data.unicef.org
Simulations for Equity in Education (SEE), www.unicef.org/education/bege_SEE.html

United Nations Educational, Scientific and Cultural Organization (UNESCO)

NFE-MIS Handbook: Developing a sub-national non-formal education management information system, Paris, 2005; available at http://www.unesco.org/new/en/education/themes/education-building-blocks/literacy/resources/non-formal-education
Open PDF at http://unesdoc.unesco.org/images/0014/001457/145791e.pdf

Education for All Global Monitoring Report 2010: Reaching the marginalized, Paris, 2010; available at www.unesco.org/new/en/education/themes/leading-the-international-agenda/efareport

United Nations Girls' Education Initiative (UNGEI)

'Resources', www.ungei.org/resources/index_460.html

Equity and Inclusion in Education: A guide to support education sector plan preparation, revision, and appraisal, First edition, Education for All Fast Track Initiative Secretariat and UNGEI, Washington, D.C., April 2010; available at www.ungei.org/resources/index_2393.html open PDF at www.ungei.org/resources/files/Equity_and_Inclusion_Guide.pdf

Other resources

Carr-Hill, R. (2012). Finding and then counting out-of school children, *Compare: A Journal of Comparative and International Education*, 42(2), pp 187-212.

Chawla, Louise, 'Evaluating Children's Participation: Seeking areas of consensus', PLA Notes, no. 42, International Institute for Environment and Development, London, October 2001, pp. 9–13. Open PDF at www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CCAQFjAA&url=http%3A%2F%2Fwww.colorado.edu%2Fcye%2Fnode%2F485%2Fattachment&ei=cUBeVLadHZLIsQTytYDQCw&usg=AFQjCNG-E_WEHYu9--eVwTLw4GRgr7wW9g&bvm=bv.79189006,d.cWc

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Hammond, Cathy, Dan Linton, Jay Smink and Sam Drew, Dropout risk factors and exemplary programs: A technical report, National Dropout Prevention Center, Clemson, SC, 2007.

Hunt, Frances, 'Dropping out from school: A cross country review of literature', Research monograph, Consortium for Research on Educational Access, Transitions and Equity (CREATE), Falmer, 2008.

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International Labour Organization (ILO), 'Report of the Conference: 18th International Conference of Labour Statisticians', 24 November-5 December 2008.

Jensen, R., The (Perceived) Returns to Education and the Demand for Schooling, *The Quarterly Journal of Economics*. 125 (2), 2010, pp. 515-548.

Lewin, Keith M., 'Improving access, equity and transitions in education: Creating a research agenda. Research monograph', Consortium for Research on Educational Access, Transitions and Equity (CREATE), Falmer, 2007. available from http://sro.sussex.ac.uk/1828/ open PDF at www.create-rpc.org/pdf_documents/PTA1.pdf

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United Nations Population Division, *World population prospects: The 2008 revision*, UNDP, New York, 2009.

Annex B.
Government involvement letter template

The following is adapted from the letter to the government from the UNICEF Eastern and Southern Africa Regional Office (ESARO).

Dear _____

I am writing to you on behalf of the United Nations Children's Fund (UNICEF) < UNICEF Regional Office >. As part of our on-going efforts to support governments to reach all children with basic education UNICEF and the UNESCO Institute for Statistics (UIS) launched a global Out-of-school Children Initiative (OOSCI) in 2010. The aim of this initiative is to improve the analysis around the factors affecting the exclusion of these children, leading to more targeted and effective policies and programmatic approaches. Thus far, < X > countries in the region: < .., .., .. > have carried out studies and we are now identifying those countries which will participate in the future.

The studies consist of three main components, a quantitative analysis of who and where the out-of school children are, a systems analysis of the related barriers, and a policy and strategy analysis. Further details are provided in the attached documentation and can also be obtained by contacting < … >, copied to < … >. Further countries selected for support will receive technical and financial support from the relevant UNICEF Country Office, < UNICEF Regional Office > and UIS, with complementary analysis performed by the <Include other technical partners>. Experience has demonstrated the crucial importance of ministry of education support for, and involvement in, these studies from the initial inception to completion, dissemination and utilisation. < Insert example >

In selecting the countries consideration will be given to the degree of planned government involvement, be that financial, technical or procedural or a combination of all three. Consideration will also be given to the strategic timing of the study e.g. are any education policies, plans or laws due to be reviewed or updated in the near future, are out-of–school children a current priority area for the ministry of education.

We would be happy to consider any requests for support from governments in the region which detail why they would like to do a study on Out-of-School Children and what their commitments are in terms of supporting the study and the utilisation of its results. If you wish to discuss it further before formally declaring an interest please do not hesitate to contact < … > at the < UNICEF Regional Office > (details given above).

Countries that are interested in conducting such studies will be requested to provide more specific information and send a formal declaration of interest.

Yours faithfully,

< UNICEF and UIS representatives >

Attached: OOSCI Briefing Paper < adapted for region >; Global OOSCI Flyer.

Annex C.
Templates for Technical Team, Steering Committee and consultants

TOR: OOSCI TECHNICAL TEAM
Terms Of Reference Of The Out-Of-School Children Initiative (OOSCI)

BACKGROUND
In 2010, UNICEF and the UNESCO Institute for Statistics (UIS) launched a global Out-of-school Children Initiative (OOSCI). The aim of this initiative is to improve the analysis around the factors affecting the exclusion of children from education, leading to more targeted and effective policies and programmatic approaches. Those children who are still out of school often face deep rooted structural inequalities linked to income poverty, exposure to child labour, conflict and natural disasters, location, sex, HIV and AIDS, disability, ethnicity, language and religion. These are major barriers to education that place many countries at risk of not achieving universal primary or basic education.

Many countries face challenges in accurately identifying children who are out of school, measuring the scope and complexity of exclusion, its causes, and integrating this evidence in policy and planning. There is a need to better utilize existing data by strengthening both data collection methods and analytical resources. Participation in the Global Initiative on Out-of-School Children will provide a knowledge base that can support existing interventions and new context-appropriate policies and strategies for accelerating enrolment and sustaining attendance for the most excluded and marginalized children.

PURPOSE
To conduct quantitative and qualitative analysis on the profiles, barriers and policies for out-of-school children and those at risk of dropping out, and produce a national report which follows the methodology and structure outlined in the OOSCI *Operational Manual*. The technical team will work in consultation with relevant government institutions, and in cooperation with consultants and the regional team, which is comprised of staff from UNICEF <Insert relevant regional and country offices>, UIS, and external consultants.

At the national level, the technical team will report at key milestones in the development report to the national steering committee set up to guide and approve the national report.

TERMS OF REFERENCE
- Undertake data inventory and quality assessment, using tools provided by the regional team, to identify main data sources for the OOSCI analysis
- Acquire approval to use the data sources for analysis and dissemination of the findings in the OOSCI national report
- Participate in the national technical training workshop, which will be facilitated by the regional team
- Develop study design, conduct data review or desk reviews as needed, and develop a detailed plan for analysis consistent with the methodology in the OOSCI *Operational Manual*, in collaboration with consultants and the regional team
- Ensure the reliability and accuracy of the statistical data analysis produced
- Develop ToR for consultant to support/ conduct the analysis of statistical data on out-of-school children, and on the relevant barriers and policies
- Collect relevant policy documents and study reports to feed into the analysis on barriers and policies, in collaboration with the regional team
- Coordinate the process of qualitative analysis and the integration of the findings in

the national report in collaboration with the regional team
- Produce the national report with technical assistance from the regional team
- Conduct presentations to the national steering committee to update on progress and preliminary findings of the national report
- Conduct consultations/seminars with other relevant stakeholders (government and development partners) to share the methodology and the findings from the analysis throughout the research period – as well as the draft report
- Coordinate the endorsement of the final draft of the national reports through formal and informal advocacy activities, including but not limited to the national steering committee.

MEMBERS OF THE TECHNICAL TEAM

Two experts on statistics: One expert on the country's Education Management Information System from the ministry of education, and one expert on national household surveys or census from the National Statistical Office

One or two experts on national Education policy from the ministry of education or other specialized agency/ or centres

A UNICEF focal person (possibility to hire national expert to act as facilitator and provide on-going in country support)

National and/or external consultants to be hired by the technical team (ToR template will be provided by regional team).

TOR: OOSCI STEERING COMMITTEE

Terms Of Reference Of The Out-Of-School Children Initiatives (Oosci)

BACKGROUND

In 2010, UNICEF and the UNESCO Institute for Statistics (UIS) launched a global Out-of-school Children Initiative (OOSCI). The aim of this initiative is to improve the analysis around the factors affecting the exclusion of children from education, leading to more targeted and effective policies and programmatic approaches. Those children who are still out of school often face deep rooted structural inequalities linked to income poverty, exposure to child labour, conflict and natural disasters, location, sex, HIV and AIDS, disability, ethnicity, language and religion. These are major barriers to education that place many countries at risk of not achieving universal primary or basic education.

Many countries face challenges in accurately identifying children who are out of school, measuring the scope and complexity of exclusion, its causes=, and integrating this evidence in policy and planning. There is a need to better utilize existing data by strengthening both data collection methods and analytical resources. Participation in the Global Initiative on Out-of-School Children will provide a knowledge base that can support existing interventions and new context-appropriate policies and strategies for accelerating enrolment and sustaining attendance for the most excluded and marginalized children.

PURPOSE

Lead and monitor the overall activities related to the OOSCI and provide political and technical support to the national technical team and regional team;

Supervise the national technical team that will write the OOSCI national study

Facilitate the successful and timely production of the OOSCI national report and ensure government approval of final report

TERMS OF REFERENCE

The Steering Committee will perform the following functions with the technical support of the regional team:
- Recommend and facilitate access to databases and data sources, key documents and research

to be used in the into the national report
- Convene periodic meetings with the national technical team to review progress of the national study, and provide guidance on preliminary findings
- Participate in national planned activities (technical workshop or other events) relevant for the successful production of the national report, and also for the implementation of its findings
- Provide high-level review of the national report, and monitoring efforts
- Provide input for development, design and finalization of the OOSCI national report, including refinement of the results of the data analysis
- Ensure that a national monitoring and evaluation plan is in place to capture the results of OOSCI national report
- Ensure systematic dissemination and effective utilization of the findings from the national report to inform national policies and strengthen strategies targeting OOSC
- Support and coordinate with relevant partners the national capacity development activities related to improvement of the data quality, incl. harmonization and streamlining of relevant data sources

MEMBERS OF THE STEERING COMMITTEE

Chairperson: Permanent Secretary or at least equivalent level of senior ministry official from MoE

Member-Secretary: Head of the planning unit at the ministry of education

Other members may include:
- Officer in charge of education statistics
- The appropriate officers from the relevant departments at the ministry of education such as pre-school department, primary education department, inclusive education department, non-formal education department, etc.
- Representatives from educational research institutions concerning education policy and analysis
- Representative from National Statistical Office, the department responsible for census and household surveys
- Representative from the relevant line ministries (such as health, labour), the departments responsible for collection and analysis of data
- Representatives from the line ministry/ department responsible for national vital registration and local administration
- Representative from key national and international NGOs which are involved in activities concerned with out-of-school children
- Representative from the Teachers' Union
- Representative from EFA development partners or/and Thematic Group
- Representative from UNICEF
- Representative from UIS or UNESCO

TOR: CONSULTANT INDIVIDUAL CONSULTANCY:

Technical assistance to support analysis of Out-of-School Children in <Insert country>

Closing date: <DATE>

BACKGROUND

Therefore, in 2010 UNICEF and UIS launched the global initiative on Out-of-School Children (OOSCI) to develop profiles of these excluded children, link quantitative data with socio-cultural barriers and identify policies to address patterns of exclusion. The initiative has country, regional and global dimensions and aims to achieve research-, action-oriented and capacity development related results.

Many countries face challenges in accurately identifying children who are out of school, measuring the scope and complexity of exclusion, its causes=, and integrating this evidence in policy and planning. There is a need to better utilize existing data by strengthening both data collection methods and analytical resources. Participation in the Global Initiative on Out-of-School Children will provide a knowledge base that can support existing interventions and new

context-appropriate policies and strategies for accelerating enrolment and sustaining attendance for the most excluded and marginalized children.

More than 30 countries have done OOSCI studies and analysis and more than 15 countries are expected to join the initiative.

The specific objectives of the OOSCI study are the following:

- Develop specific profiles of out-of-school children and children at risk of dropping out, according to the OOSCI Operational Manual and the five dimensions of exclusion (5DE); these profiles should capture the complexity of the problem in terms of magnitude, inequalities and multiple disparities around the 5DE;
- To analyse the barriers to education children face and to clarify the dynamic and causal processes related to the 5DE;
- To analyse existing policies and interventions and whether they are addressing the complex needs of out-of-school children and children at risk of dropping out;
- Based on the analysis, formulate recommendations on how to address the issues linked to exclusion from education (out-of-school children) and exclusion within education (children who face a high risk of dropping out), taking into account the national context.

OBJECTIVE

The overall objective of this consultancy is to support the development of <Insert country>'s study within the Global Out-Of-School Children Initiative (OOSCI). This requires strong technical expertise in data and policy analysis with regards to out-of-school children, as well as project implementation skills to ensure completion of the analysis.

Project implementation support: in coordination with the OOSCI study focal person, ensure timely and effective project implementation, facilitation of communication and ongoing sharing of results among the involved partners (including a national steering committee), overall quality assurance and capacity building among the technical team.

Technical expertise: lead the completion of the data tables and the profiles analysis of the children in the five dimensions of exclusion, identify key policy documents and other relevant sources to analyse the profiles and their related barriers to education, analyse policy gaps and develop of recommendations for strengthening institutional capacities and targeted interventions for children excluded from education, and finally develop of draft country report.

The OOSCI study is led by the government of <Insert country>, which has set up a Steering Committee and a Technical Team to coordinate the study. The required support described this ToR will be to support the technical team which is responsible for developing the national study.

ROLES AND RESPONSIBILITIES OF THE CONSULTANT:

- Participate in a national training workshop with the technical team
- Ensure timely and effective project implementation: Develop a work plan with the technical team
- Conduct statistical and policy analysis based on the OOSCI Operational Manual, in collaboration with the technical team. <Insert modified responsibilities:>
  - Complete the core data tables and the analysis of profiles of out-of-school children and children at risk of dropping out
  - Support the analysis the barriers to education faced by the identified profiles of excluded children.
  - Identify key policy documents and other relevant sources for the analysis of policies
  - Ensure completion of analysis of policy gaps and development of recommendations
- Capacity building among the technical team: Explain and validate analytical process and findings from data and policy analysis with members of the technical team. Communicate and share results among the involved partners throughout the study's development
- Communication and advocacy: Contribute to development of communication and advocacy strategies based on research note and action plan, and their timely implementation. Prepare a PowerPoint presentation on findings, lessons learnt from the process and recommendations for interventions and policies.

DURATION AND ESTIMATED TIMELINE
(See table C.1 for a sample timeline).
<Insert dates>

Proposed schedule for deliverables and
<Enter deliverables, target delivery dates and estimated amount to be paid>

Working conditions
The consultant will work in close coordination with the national technical team led by the government, in partnership with UNICEF and UIS.

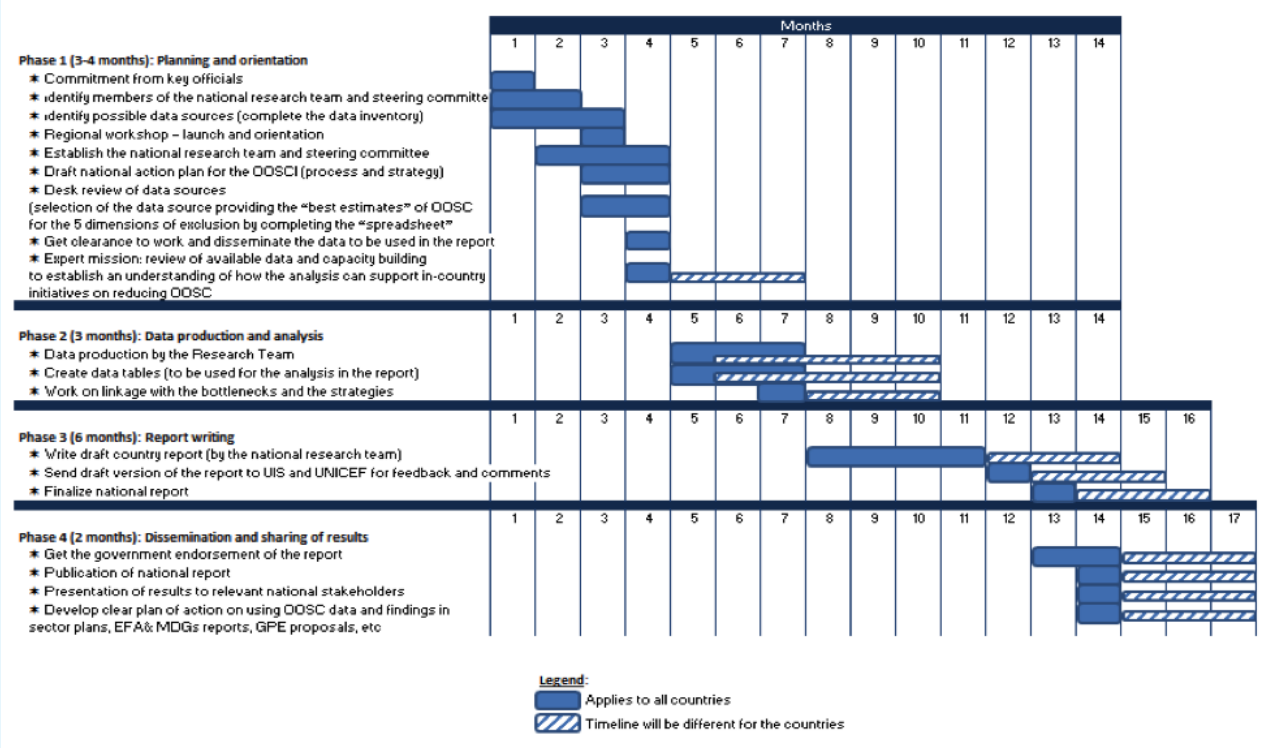
The consultant is expected to be in country throughout the consultancy, and will be required to be in periodic contact (remotely or in person) with the technical team.

Qualifications
- A Masters or advanced degree in education, social science, public policy, management or related field
- Minimum 5 years of work experience in conducting data production, data review, analysis and reporting and on equity issues in children's education, preferably in <Insert region>
- Knowledge of child's rights approaches
- Ability to work with governments and facilitate among various stakeholders
- Expert knowledge and experience in SPSS, STATA or similar software
- Expert knowledge and experience in Microsoft Excel
- Excellent analytical capacity of both quantitative and qualitative data
- Effective communication skills, both orally and in writing, in English
- Sensitivity to diverse opinions and difficulties arising from differing social and cultural perceptions
- Work experience with the UN preferred
- Knowledge of / fluency in the local language an asset

Supervisor
The consultant will work under the direct supervision of

Applications
<Insert process to submit application>

TABLE C.1: SAMPLE OF A TENTATIVE TIMELINE



Annex D.
Out-of-school Children Monitoring Framework

The UNICEF-UIS OOSCI Monitoring Framework distinguishes eight common barriers to obtaining and using relevant and accurate data on OOSC:

- Barrier 1: Information on OOSC and children at risk of dropping out is incomplete;
- Barrier 2: Information on OOSC and children at risk of dropping out is inaccurate;
- Barrier 3: EMIS cannot incorporate new indicators and methodologies;
- Barrier 4: Gaps in vertical information flows from the local to the national level;
- Barrier 5: Gaps in horizontal information flows: inter-agency collaboration and data sharing;
- Barrier 6: Children at risk of dropping out are not identified;
- Barrier 7: Data on OOSC and children at risk of dropping out are not reported and analysed;
- Barrier 8: Data on OOSC and children at risk of dropping out are not used for evidence-based policy and decision making.

The eight types of barriers listed above correspond to the eight-step monitoring framework, which proposes step-by-step solutions to each of these challenges. These eight steps are described in **Figure D1**. Steps 1 to 3 are concerned with improving the availability and accuracy of data on OOSC and children at risk of dropping out. Steps 4 to 5 are concerned with closing gaps in horizontal and vertical information flows. Steps 6 to 8 focus on using and analysing the data to inform and develop evidence-based policies and strategies to reduce exclusion from education.

Figure D2 summarizes potential information loss at various stages in the monitoring system, from the collection of data to the use of the data for evidence-based decision making. The length of the bars in this hypothetical example reflects the percentage of OOSC captured at each step. The decreasing length of the bars at each step reflects information loss, so that by the time the information is analysed and used, only a fraction of the total number of OOSC may be captured (or none at all). Information on children at risk of dropping out is not included in this example – it is often not collected and analysed at all, or only at the school level.

The first bar at the top represents all OOSC in the country. The second (orange) bar covers all OOSC for whom records exist in government and school databases, including the EMIS, but also other databases such as the Civil Registry or Social Services database. These children have not yet been identified as being out of school, but merely have their personal details recorded in a government database. *Invisible* OOSC are now excluded, as they represent those OOSC who are not recorded in any database, such as homeless and refugee children. The third bar (blue) reflects the actual proportion of OOSC known to the ministry of education, which excludes *Semi-invisible* OOSC – that is, currently invisible OOSC who could be made visible through cross-referencing other government databases or by checking school records. The fourth bar (green) represents OOSC included in reporting and analysis. Certain groups of OOSC may be excluded from reporting and analysis, and are thus referred to as *forgotten* OOSC. The fifth and final bar (green) represents OOSC who receive support. Inclusion in reporting and analysis does not guarantee that efforts will be made to support these children, and OOSC who do not receive support in spite of their situation being known are referred to as *ignored* OOSC.

For further details regarding the OOSC Monitoring Framework, please refer to the publication: UNICEF and UIS (2015). *Framework for Monitoring Out-of-School Children and Adolescents*, Geneva: UNICEF ECA.

FIGURE D1. EIGHT STEP MONITORING FRAMEWORK FOR OOSC AND CHILDREN AT RISK OF DROPPING OUT

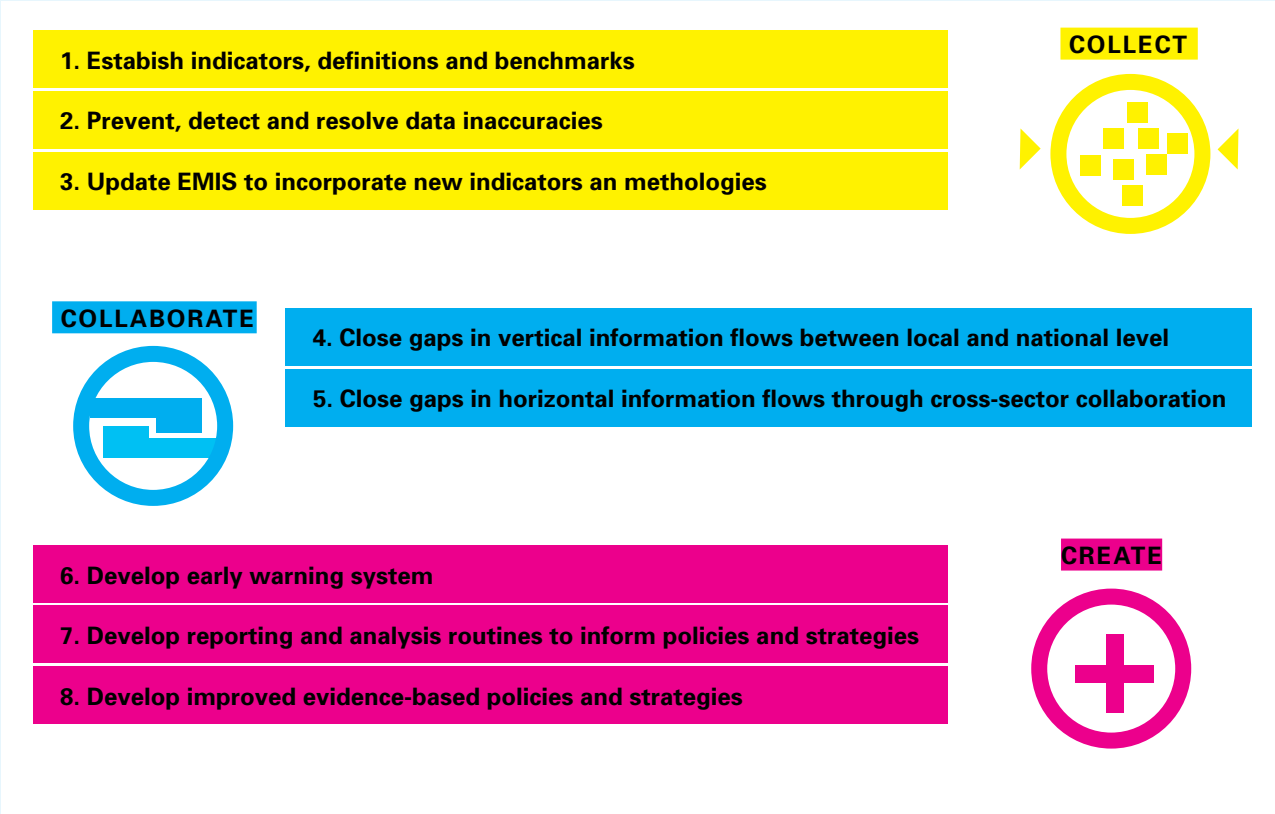
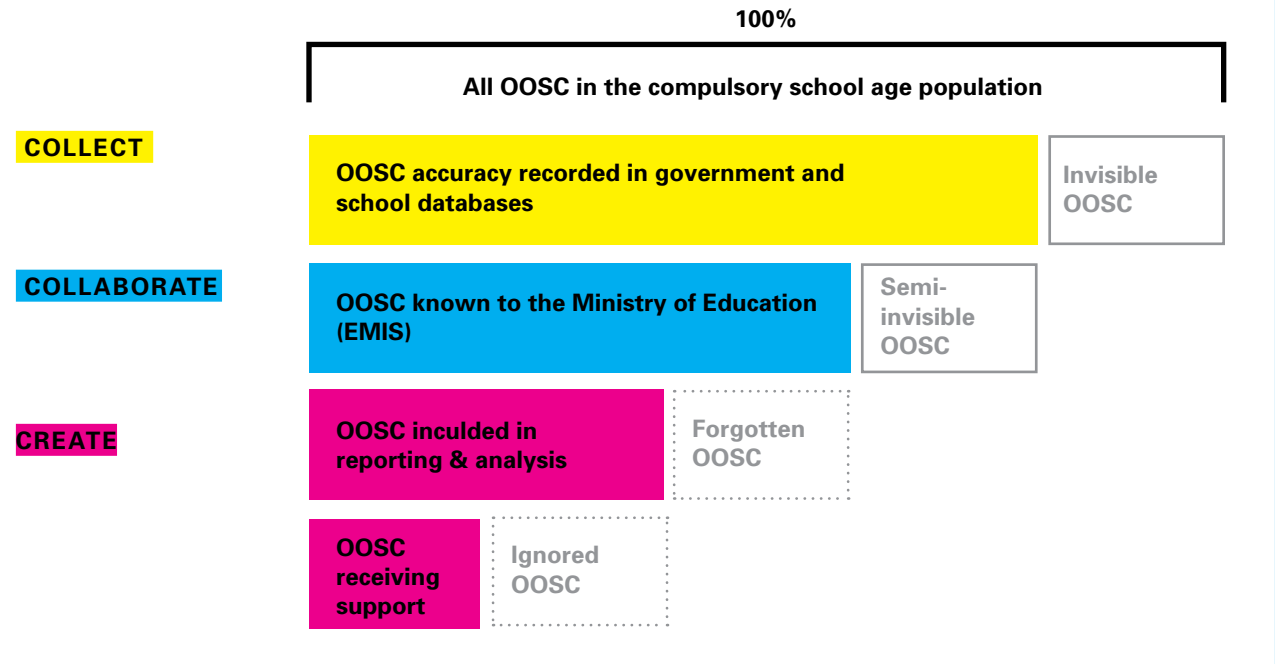


FIGURE D2. HYPOTHETICAL EXAMPLE OF INFORMATION GAPS IN EACH STEP OF THE MONITORING SYSTEM



Annex E.
Data Inventory template

COUNTRY

DATA SOURCE

Please complete this document for all sources of data on out-of-school children and children at risk of dropping out collected during the last five years (or more, if a comparison of trends over time is desired). Use a separate form for each data source. Examples for household survey data and administrative data are attached.

Include information on data collection systems and sources that are not national in coverage but provide information on out-of-school children for a specific geographic region of the country (for example, a province or state) or for a specific subpopulation group.

If applicable, please provide questionnaires, codebooks and other documents that provide a better understanding of the data.

Name

Position

Department

Agency

Address

Telephone

Email

SOURCES OF DATA ON OUT-OF-SCHOOL CHILDREN

Complete one form for each data source. Please attach the questionnaire, codebook and other information, if applicable.

AGENCIES RESPONSIBLE FOR COLLECTION AND DISSEMINATION OF DATA

DATA COLLECTION DATE

(not publication date)

FREQUENCY OF DATA COLLECTION

(for example, annual, every two years)

DEFINITION OF AN OUT-OF-SCHOOL CHILD

(for example, is not currently enrolled, or did not attend school at any time in the last three months)

DEFINITIONS OF OTHER EDUCATION TERMS

School entrance age

Enrolment

Attendance

Drop-out

Educational attainment

Other relevant terms

SAMPLE DESIGN (how was the sample chosen)?
(for example, complete population (not sample), multi-stage stratified sampling based on census)

SMALLEST ADMINISTRATIVE AREA FOR WHICH STATISTICS ON THE OUT-OF-SCHOOL POPULATION ARE STATISTICALLY ACCURATE

POPULATION COVERAGE OF THE DATA COLLECTION
(for example, covers complete population, specific sub-group of the population (people aged 15 and older))

GEOGRAPHIC COVERAGE OF THE DATA COLLECTION
(for example, all regions, specific regions)

TYPES OF DISAGGREGATION POSSIBLE WITH DATA
(for example, by age, sex, area, wealth quintile, socio-economic group, ethnicity, religion, type of school)

DATA AVAILABILITY AND ACCESS
(include information on type of data available and procedure to acquire the data)

DATA LIMITATIONS (coverage, accuracy)

OTHER INFORMATION

EXAMPLE FOR HOUSEHOLD SURVEY DATA

Complete one form for each data source. Please attach the questionnaire, codebook and other information, if applicable.

DATA SOURCE

National Household Expenditure Survey

AGENCIES RESPONSIBLE FOR COLLECTION AND DISSEMINATION OF DATA

National Statistical Office

DATA COLLECTION DATE

(not publication date)

January - March 2012

FREQUENCY OF DATA COLLECTION

(for example, annual, every two years)

Every two years since 2000

DEFINITION OF AN OUT-OF-SCHOOL CHILD

(for example, is not enrolled, did not attend in the last three months)

The child did not attend school during the three weeks preceding the survey (reference: survey manual)

DEFINITIONS OF OTHER EDUCATION TERMS

School entrance age

Not used in the data collection (reference: survey manual)

Enrolment

Not applicable

Attendance

A child who attended school at any time during the current school year (reference: survey manual)

Drop-out

A child who attended school during the previous school year but did not attend during the current school year (reference: survey manual)

Educational attainment

The highest educational level attended by a person (primary, secondary, tertiary)

Other relevant terms

...

SAMPLE DESIGN

(how was the sample chosen)? (for example, complete population (not sample), multistage stratified sampling based on census))

Survey data collected designed to be nationally representative. Survey design based on stratification based on latest census (see metadata attached).

SMALLEST ADMINISTRATIVE AREA FOR WHICH STATISTICS ON THE OUT-OF-SCHOOL POPULATION ARE STATISTICALLY ACCURATE

Province level.

POPULATION COVERAGE OF THE DATA COLLECTION

(for example, covers complete population, specific sub-group of the population (people aged 15 and older))

Data collected for all household members. Population not living in households (living on the street, in orphanages, hospitals or prisons were not included.

GEOGRAPHIC COVERAGE OF THE DATA COLLECTION

(for example, all regions, specific regions)

Excludes two remote islands that account for 2% of the national population

TYPES OF DISAGGREGATION POSSIBLE WITH DATA
(for example, by age, sex, area, wealth quintile, socio-economic group, ethnicity, religion, type of school)

Age, sex, wealth quintile, area (urban/rural), province, education level of household head

DATA AVAILABILITY AND ACCESS
(include information on type of data available and procedure to acquire the data)

Individual-level data (without personal information) available from National Statistical Office upon request
Data available in SPSS and Stata format
Survey report available at www.xxx.gov.xx/surveys/hhsurvey2012

DATA LIMITATIONS
(coverage, accuracy)

Survey excluded two remote islands with 2% of the national population
High number of missing values in responses to questions on household wealth

OTHER INFORMATION

Questionnaire and tables with sampling errors are attached.

EXAMPLE FOR ADMINISTRATIVE DATA

Complete one form for each data source. Please attach the questionnaire, codebook and other information, if applicable.

DATA SOURCE

National Education Management Information System

AGENCIES RESPONSIBLE FOR COLLECTION AND DISSEMINATION OF DATA

Division of Planning, Ministry of Education

DATA COLLECTION DATE
(not publication date)

March 2015

FREQUENCY OF DATA COLLECTION
(for example, annual, every two years)

Annual

DEFINITION OF AN OUT-OF-SCHOOL CHILD
(for example, is not enrolled, did not attend in the last three months)

A child of official compulsory school age who is not registered in school;
A child of official compulsory school age who is enrolled, but has not attended school for 30 consecutive school days (6 weeks).

DEFINITIONS OF OTHER EDUCATION TERMS

School entrance age

A child who reached the age of 5 before 1 September

Enrolment

All children registered in school (available from the school census)

Attendance

All children attending school (available from the school attendance sheet)

Drop-out

A student who does not attend school during the school year for a period of 30 consecutive school days or more.

Educational attainment

The highest grade a person completed

Other relevant terms

Repeater: A student who enrolled in the same grade in the previous and current school year

SAMPLE DESIGN
(how was the sample chosen)? (for example, complete population (not sample), multistage stratified sampling based on census))

Data collection not based on sample, covers all schools in the country.

SMALLEST ADMINISTRATIVE AREA FOR WHICH STATISTICS ON THE OUT-OF-SCHOOL POPULATION ARE STATISTICALLY ACCURATE

School district level.

POPULATION COVERAGE OF THE DATA COLLECTION
(for example, covers complete population, specific sub-group of the population (people aged 15 and older))

All students enrolled in public and private schools in the country. Teachers and administrators also included.

GEOGRAPHIC COVERAGE OF THE DATA COLLECTION
(for example, all regions, specific regions)

Should be national, but some conflict areas did not submit data for latest year (about 5% of national enrolment)

TYPES OF DISAGGREGATION POSSIBLE WITH DATA
(for example, by age, sex, area, wealth quintile, socio-economic group, ethnicity, religion, type of school)

Age, sex, geographic region, type of school (public, private, NGO-run), grade, education level, with or without school grant, disability

DATA AVAILABILITY AND ACCESS
(include information on type of data available and procedure to acquire the data)

The Planning Department maintains the database since 2005. Annual statistical reports are available at www.moe.gov.xx/schcensus/reports

DATA LIMITATIONS
(coverage, accuracy)

In some cases, enrolment is likely to be inflated due to per capita financing introduced in 2013. Data on age-specific enrolment should be interpreted with caution due to lack of birth certificates for children, particularly in provinces D and E.

Due to the flood in 2010, data for provinces A and B are not available for the school year 2010-2011.

OTHER INFORMATION

Annex F.
Data quality assessment worksheet

Please complete **one worksheet for each major data source** on school participation of children, using the Data Inventory Template. Possible data sources include administrative data (EMIS), household survey data (MICS, DHS or national sample survey), and census data. Then, calculate the data source assessment score for each source. To do this, add the associated "score value" (1, 2 or 3) for each question, for a possible total score of 45 points. Data sources with higher scores indicate they may serve as good candidates for data analysis. Compare this score and your observations with the scores for other major data sources. In addition, this worksheet can be used as a tool to identify the potential sources of discrepancies between estimates.

Important note: The worksheet is a tool to facilitate discussion in the technical team and steering committee, and it is not intended for publication in the OOSCI study. The worksheet score provides a **guideline for assessing data quality and suitability**. You may assign these factors different levels of importance, using your own judgement and expertise to identify the best data sources for out-of-school children analysis for your country. Some questions are more relevant for surveys, and some questions more relevant to administrative data.

NAME OF DATA SOURCE:

Score	DATA SOURCE ASSESSMENT CRITERIA:
1.	**AGE: When were the data collected (not published)?**
☐ (1)	6-10 years ago (2005-2009)
☐ (2)	3-5 years ago (2010-2012)
☐ (3)	Within the last 2 years (2013-present)
2.	**FREQUENCY: How often are the data collected? (Possibility of time series data)**
☐ (1)	The data are from a one-time collection
☐ (2)	The data are from a repeated or periodic collection (For example: every 3-5 years)
☐ (3)	The data are from an annual or semi-annual collection
3.	**ACCURACY OF AGE DATA: How are children's age data collected?**
☐ (1)	Age data not reported
☐ (2)	Age data for children are collected from the teacher or household respondent
☐ (3)	Age data for children are collected from official records (birth certificate, etc.)

4. EASE OF ACCESS: What is the procedure to acquire access to the dataset in standard format for analysis (raw, unit level)?

- ☐ (1) Data access procedure is time consuming and likelihood of access is uncertain
- ☐ (2) Data access procedure is time consuming and likelihood of access is certain
- ☐ (3) Data access procedure is not time consuming and likelihood of access is certain

5. SOFTWARE EXPERTISE REQUIRED FOR DATA ANALYSIS: Is there sufficient capacity in the software generally used to analyse this data?

- ☐ (1) Insufficient capacity
- ☐ (2) Some capacity or possibility of training or support
- ☐ (3) Sufficient capacity

6. PURPOSE: To what extent was this data source designed to collect data on education? (Consider coverage of appropriate age groups, sample design (if survey))

- ☐ (1) Data collection not intended for generating education statistics (labour force, health, etc.)
- ☐ (2) Data collection includes a module primarily intended for generating education statistics (health and education)
- ☐ (3) Data collection primarily intended for generating education statistics

7. COVERAGE OF AGE DATA: For which ages are data on current school attendance collected?

- ☐ (1) Primary and lower secondary age
- ☐ (2) Pre-primary to upper secondary age
- ☐ (3) Pre-primary to tertiary age

8. COVERAGE OF EDUCATION LEVELS: For which levels of education are attendance data collected?

- ☐ (1) Primary education
- ☐ (2) Primary and secondary education
- ☐ (3) Pre-primary to tertiary education

9. COVERAGE OF EDUCATIONAL INSTITUTION TYPES: Are data collected on (or do they include) all types of educational institutions in the country (Example: public, private, NGO, religious, community or unregistered schools)?

- ☐ (1) Data collection excludes some important types of educational institutions
- ☐ (2) Data collection includes most types of educational institutions
- ☐ (3) Data collection includes all types of educational institutions

10. USEFULNESS FOR DISAGGREGATED DATA ANALYSIS: What is the smallest administrative area for which the data source is designed to provide reliable and representative statistics on out-of-school children?

- ☐ (1) National level only
- ☐ (2) Macro administrative region (for example, state or province) and area of residence (urban/rural)
- ☐ (3) Micro administrative region (for example, district or village)

11. USEFULNESS FOR IDENTIFYING CHARACTERISTICS OF OUT-OF-SCHOOL CHILDREN: To what extent is disaggregation (sub-national analysis) possible with this data source (for example, by age, sex, area, wealth, disability, ethnicity, region, and child labour status)?

- ☐ (1) Limited disaggregation possible (for example, only by sex)
- ☐ (2) Some disaggregation possible, but some important groups are not available (for example, analysis by area of residence and wealth quintile is possible, but not ethnicity or disability)
- ☐ (3) Significant disaggregation possible, including most high priority groups (for example, by disability, child labour status, etc.)

Consider the definitions of the following key terms used in the data source:

- School participation (What is the definition of "in school"?)
- School dropout (What kind of school absence is considered "dropping out"?)
- Educational attainment
- Other relevant terms

12. CONSISTENCY OF EDUCATION TERMS: How would you rate these terms on their consistency with standard international definitions? (UIS indicator and education term definitions can be found in Arabic, English and French in the UIS Glossary at www.uis.unesco.org/Pages/Glossary.aspx)

- ☐ (1) Very few education terms are consistent with standard definitions
- ☐ (2) Some education terms are consistent with standard definitions
- ☐ (3) Most education terms are consistent with standard definitions

13. COMPARABILITY OF EDUCATION TERMS: How comparable are the definitions with other national data sources?

- ☐ (1) Very few education terms are comparable with other national data sources
- ☐ (2) Some education terms are comparable with other national data sources
- ☐ (3) Most education terms are comparable with other national data sources

ADDITIONAL CRITERIA RELEVANT TO HOUSEHOLD SURVEY DATA SOURCES

14. DATA COVERAGE OF POPULATION OF INTEREST: To what extent has the data source considered coverage of disadvantaged groups in its data collection (sample design)?

- ☐ (1) Sample design does not explicitly consider coverage of disadvantaged groups
- ☐ (2) Sample design considers coverage of some disadvantaged groups
- ☐ (3) Sample design considers coverage of many disadvantaged groups

15. CONSISTENCY OF AGE AND SCHOOL PARTICIPATION DATA: To what extent is there a time lag between the recorded age of children and the start month of the academic year? (In sources with long data collection periods, select the answer covering the majority of cases (>50%)).

- ☐ (1) Age data are recorded more than 6 months after the start month of the school year (large gap)
- ☐ (2) Age data are recorded between 2 and 6 months after the start month of the school year (small gap)
- ☐ (3) Age data are recorded during the start month of the school year (no gap)

ARE THERE ANY OTHER ADVANTAGES OR LIMITATIONS OF THIS DATA SOURCE?

TOTAL SCORE:

Annex G.
Software for classification of out-of-school children by school exposure (Dimensions 2 and 3)

The UIS has designed a spreadsheet to facilitate the calculation of the number of out-of-school children in Dimensions 2 and 3 as defined by the Five Dimensions of Exclusion (see Figure G1). This guide explains the main components of the spreadsheet and provides instructions for its use.

Software requirements: The spreadsheet can be used with MS Excel and LibreOffice Calc.

ABBREVIATIONS USED IN SPREADSHEET:

DHS	Demographic and Health Survey
ISCED	International Standard Classification of Education
MICS	Multiple Indicator Cluster Survey
OOSC	Out-of-school children
UIS	Institute for Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNPD	United Nations Population Division

Layout of spreadsheet: The spreadsheet is divided into two parts: in Tables 1, 2 and 3 the user enters data and in Tables 4, 5 and 6, the spreadsheet automatically calculates the share and number of children in Dimensions 2 and 3. Each table is organized by age and level of education.

In table 1 of the spreadsheet, "Education system", the entry ages and durations of primary (ISCED 1) and lower secondary education (ISCED 2) are entered by the user. These ages are needed for the calculation of the values in tables 4 and 5. Table 1 also lists the sources of the population data in table 2 and the data for the basic calculations in table 3.

The user also enters data in table 2 "Population by age" and table 3 "School attendance status (%)". In table 2, the user enters population data by age, which may be from UNPD population estimates or a national population census. Table 3 is for basic calculations on the population from 4 to 17 years of age (depending on available data). For instructions on how to obtain the data required for each variable in table 3 from household surveys, see Annex H. Calculation for sub-groups of the population – for example disaggregated by sex, location, or wealth quintile – is possible by creating copies of the spreadsheet and entering data for the target groups in tables 2 and 3.

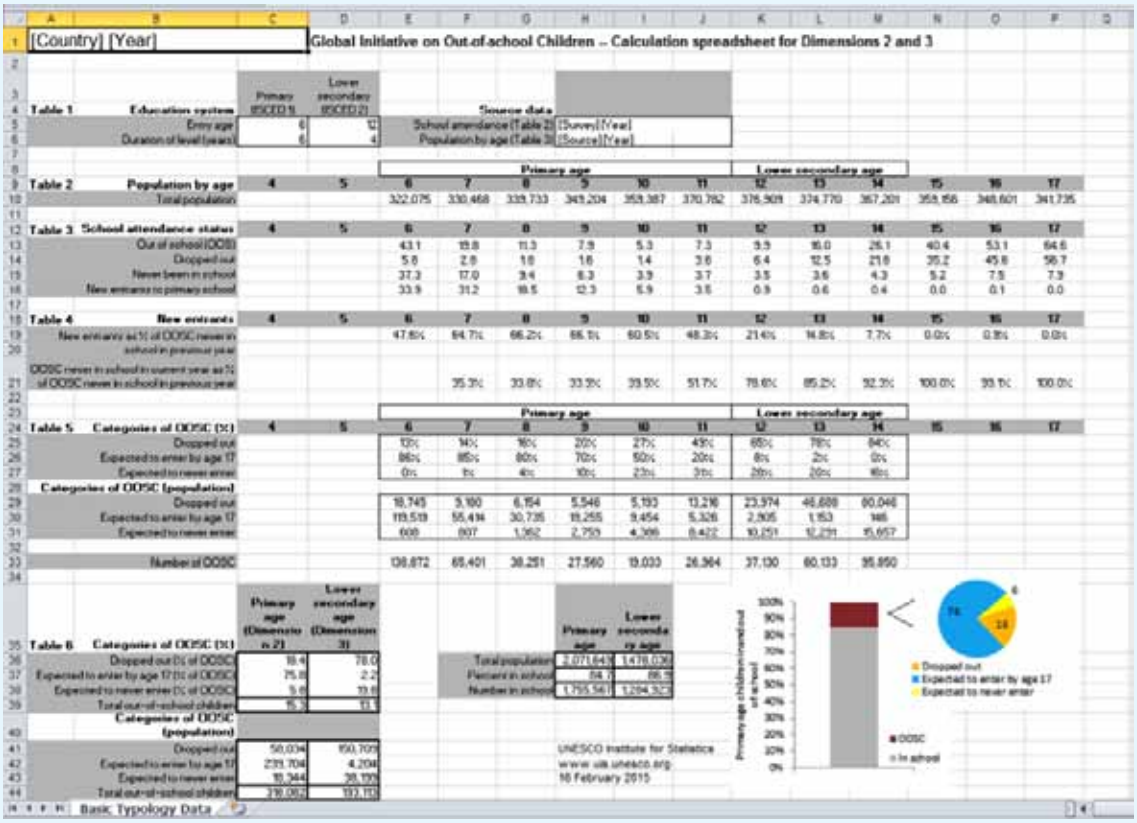
After entering the data for these four key variables, the spreadsheet will calculate the percentage and absolute number of children in each category of out-of-school children by age. Table 5 "Categories of OOSC (%)" lists the share of each age cohort that has dropped out, is expected to enter by age 17, and is expected never to enter. The second part of table 5, "Categories of OOSC (population)", uses the population data from table 2 to estimate the absolute number of children in each category by age.

In table 6, "Categories of OOSC (%)" shows the share of the population of primary and lower secondary age in the three out-of-school categories, as well as the total percentage of children in Dimensions 2 and 3. Similarly, "Categories of OOSC (population)" presents an estimate of the absolute size of the out-of-school population and the three out-of-school categories.

Explanation of calculation and functions in spreadsheet: The formulas to calculate the data in tables 4, 5 and 6 of the spreadsheet can be reviewed in Excel and Calc by clicking on the respective cells. To follow each calculation step by step in the spreadsheet, the *Evaluate Formula* function in Excel can be helpful.

In table 4 "New entrants as % of OOSC never in school in previous year", the percentage of children at each single age who had never been in school and who entered school for the first time is calculated. The row "Out-of-school children never in school in the current year as % of OOSC

FIGURE G1: SPREADSHEET FOR CALCULATION OF DATA ON OUT-OF-SCHOOL CHILDREN



never in school in the previous year" calculates the percentage of children who have never been to school and will not enter school in the following year. The probability to enter in the future refers to the likelihood of entering school for the first time by age 17. Entry into the education system after age 17, as an adult, is not considered. Out-of-school children who are expected to enter school after they have reached age 18 are grouped together with persons who never enter school.

In the second row of table 5, "Categories of OOSC (%)", the above values are used to calculate the probability that a child will enter at each consecutive age. The cumulative percentage of children who enter school for the first time at any given age yields the total percentage of current children who have never been to school who are expected to enter by the age 17 for each age cohort. The formula for this calculation is based on the product of probabilities to enter in the future.

By contrast, the group of children who have "dropped out" (row 1 of Table 5) can be measured directly as the percentage of children at each age who attended school previously but are no longer in school. The final category of children out of school, those who are "expected to never enter" (row 3), is calculated as a residual, given by the proportion of children who are neither expected to enter, nor have dropped out.

In the second half of table 5, "Categories of OOSC (population)", the calculations above are converted to absolute numbers by referring to the population data in table 2.

In table 6, the calculations by single year of age are grouped into primary and lower secondary age. This table shows the percentage of children in Dimensions 2 and 3, and the breakdown of this population by categories based on school attendance. In "Categories of OOSC (population)", the calculations above are converted to absolute numbers by referring to the population data in table 2.

To the right of table 6, the total population of children in primary and lower secondary age is presented. In addition, the table shows the percentage and number of children in school (primary or higher education) for both age groups. These numbers are used to generate the graph in the lower right corner of the spreadsheet.

Annex H.
Example Stata code to generate data for classification of out-of-school children

This annex describes the spreadsheet that can be used to calculate and classify the number of children in Dimensions 2 and 3. For the calculations it is necessary to provide a minimum set of data that can be obtained from household surveys, for example DHS or MICS. The example below shows how the data can be extracted from DHS datasets with Stata. It is possible to adapt the code for use with other statistical packages, for example SPSS or SAS.

For disaggregated analysis, the code below can be easily changed to create the basic variables for subgroups. To do this in Stata, use the "keep if" command to select subgroups of the entire sample (for example, only boys or only girls) before the schooling variables are calculated. The user can input these variables in table 3 of the calculation spreadsheet described in Annex G. It is important to note that the population estimates in table 2 must also be updated to reflect the population of the subgroup analysed.

STATA CODE: VARIABLE CODING USING DHS DATA

```
* Stata do-file to create out-of-school typology data, Cambodia 2005-06 DHS.
* Calculation with school attendance data for two consecutive years.
* Missing values are excluded from calculations.
* UNESCO Institute for Statistics, 5 March, 2015.
* Required files: "Cambodia 2005-06 DHS HH members.dta".

#delimit cr
version 11.1
clear
set memory 50m
set more off
capture log close

* Load data
use "Cambodia 2005-06 DHS HH members.dta"

* Country information
local country = "Cambodia"
local year = "2005-06"
local survey = "DHS"

* ========================================
* Age variable
```

```
* Age
gen age = hv105

* Option 1: Keep children aged 4 to 17 years, or children with school data
* keep if age>=4 & age<=17

* Option 2: If ages are adjusted in next step, keep children up to 18 years of age
keep if age>=5 & age<=18
* Adjust ages if survey was conducted more than 6 months after beginning of school year
replace age = age-1

* ========================================
* Weight variable

* Household weight
gen hhweight = hv005/1000000
lab var hhweight “HH weight”

* ========================================
* Schooling variables

* Ever attended school
gen schlever = hv106
replace schlever = 1 if (schlever==2 | schlever==3)
replace schlever = 1 if schlever!=1 & (hv121==1 | hv121==2 | hv125==1)
replace schlever = . if schlever>1
lab var schlever “Ever attended school”
lab def schlever 0 “Never school” 1 “Attended school”
lab val schlever schlever

* Highest level attended
gen highlevl = hv106
replace highlevl = 0 if schlever==0 & highlevl>=8
recode highlevl 1=2 2=3 3=4
replace highlevl = 1 if highlevl==0 & schlever==1
replace highlevl = . if highlevl>=8
lab var highlevl “Highest level attended”
lab def highlevl 0 “None” 1 “Preschool” 2 “Primary” 3 “Secondary” 4 “Higher” 5 “Non-formal”
lab val highlevl highlevl

* School attendance in current school year
gen school = (hv121==1 | hv121==2) if hv121<9
replace school = 0 if hv106==0 & school>=.
lab var school “School attendance”
lab def school 0 “Not in school” 1 “In school”
lab val school school

* Level of education attended in current school year
gen edlevel = hv122
replace edlevel = 0 if school==0 & edlevel>=8
recode edlevel 1=2 2=3 3=4
replace edlevel = 1 if edlevel==0 & school==1
```

```
replace edlevel = . if edlevel>=8
lab var edlevel “Current level attended”
lab def edlevel 0 “None” 1 “Preschool” 2 “Primary” 3 “Secondary” 4 “Tertiary” 5 “Non-formal”
lab val edlevel edlevel

* Grade attended in current school year
gen edgrade = hv123
replace edgrade = . if edgrade>=98 & school==1
lab var edgrade “Current grade attended”

* School attendance in previous school year
gen schlly = hv125
replace schlly = 0 if hv106==0 & school>=.
lab var schlly “School attendance last year”
lab def schlly 0 “Not in school” 1 “In school”
lab val schlly schlly

* Level of education attended in previous school year
gen edlevlly = hv126
replace edlevlly = 0 if schlly==0 & edlevlly>=8
recode edlevlly 1=2 2=3 3=4
replace edlevlly = 1 if edlevlly==0 & schlly==1
replace edlevlly = . if edlevlly>=8
lab var edlevlly “Level attended last year”
lab def edlevlly 0 “None” 1 “Preschool” 2 “Primary” 3 “Secondary” 4 “Higher” 5 “Non-formal”
lab val edlevlly edlevlly

* Set school attendance to 0 for preschool and non-formal education
replace school = 0 if edlevel==1 | edlevel==5
replace schlly = 0 if edlevlly==1 | edlevlly==5

* Drop cases with missing data
drop if school>=. | schlever>=. | highlevl>=. | schlly>=. | edlevel>=.
drop if edlevel>=2 & edlevel<=4 & edgrade>=.
* Drop cases with data error
drop if edlevlly > highlevl

* ========================================
* Variables for typology of out-of-school children

* Variable to identify children out of school
gen oos = school==0
* Set preschool or non-formal education to out of school
replace oos = 1 if edlevel==1 | edlevel==5
lab var oos “Out of school”
lab def oos 0 “In school” 1 “Out of school”
lab val oos oos

* Set schlever to 1 if in primary or higher in previous or current school year
replace schlever=1 if inlist(edlevlly,2,3,4)
replace schlever=1 if inlist(edlevel,2,3,4)
```

```
* Variable to identify children never in school
gen neverschl = schlever==0
* Set preschool or non-formal education to never in school
replace neverschl = 1 if (inlist(highlevl,0,1,5,.,.a) & inlist(edlevlly,0,1,5,.,.a) ///
  & inlist(edlevel,0,1,5,.,.a))
lab var neverschl “Never in school”
lab def neverschl 0 “Attended school” 1 “Never in school”
lab val neverschl neverschl

* Dropped out with or without primary completed, after having attended primary or higher
gen dropped = (oos==1 & highlevl>=2 & highlevl<=4)
lab var dropped “Dropped out”
lab def dropped 0 “Didn’t drop out” 1 “Dropped out”
lab val dropped dropped

* Entered school (not in school last year and in first grade of primary this year)
* Identify children who entered grade 1 of primary school
gen entered = schlly==0 & edlevel==2 & edgrade==1
lab var entered “Entered school”
lab def entered 0 “Did not enter” 1 “Entered”
lab val entered entered

* Log file with data check
log using “`country’ `year’ `survey’ OOS typology.txt”, text replace
* Sum of values must be 1
egen check1 = rowtotal(school oos)
egen check2 = rowtotal(school neverschl dropped)
forval i = 1/2 {
  tab check`i’, m
}
tabstat check1 check2, by(age)
log off

* ========================================
* Create variables for single year of age

* Number of observations in each age group
levelsof age, local(ages)
foreach a of local ages {
  sum age if age==`a’ [aw=hhweight]
  local obs`a’ = round(r(sum_w))
}

* Mean values per age
collapse (mean) school oos neverschl dropped entered [aw=hhweight], by(age)

* Store number of observations
gen obs = .
levelsof age, local(ages)
foreach a of local ages {
  replace obs = `obs`a’’ if age==`a’
}
```

```
order obs

* Data check log continued
log on
* Sum of values must be 1
gen check1 = school + oos
gen check2 = school + neverschl + dropped
format check1 check2 %9.3f
forval i = 1/2 {
  tab check`i', m
}
tabstat check1 check2, by(age) format
log close

* Drop data check variables
drop check1 - check2

* ========================================
* Save data

* Drop in school variable (= 100 - oos)
drop school

* Convert variables to percent
foreach var of varlist oos - entered {
  replace `var' = `var' * 100
}

* Format variables
format oos - entered %5.1f

* Add country identifiers
gen country = "`country'"
gen year = "`year'"
gen survey = "`survey'"

* Label variables
lab var country "Country"
lab var year "Year"
lab var survey "Survey"
lab var age "Age"
lab var obs "Observations"
lab var oos "Out of school (%)"
lab var neverschl "Never in school (%)"
lab var entered "In school, not in school in previous year (%)"
lab var dropped "Left school with or without primary completed (%)"

* Save data
order country year survey age obs oos dropped neverschl entered
sort age
compress
save "`country' `year' `survey' OOS typology.dta", replace
```

```
* Transpose data for typology calculation matrix
drop country year survey obs
xpose, clear varname
ren _varname group
order group

* Save as comma-separated text file, for import into Excel
outsheet using "`country' `year' `survey' OOS typology.csv", nonames replace comma

* End of do-file
```

Annex I.
Spreadsheet for the calculation of Dimension 4 and 5 indicators

SOFTWARE FOR THE CALCULATION OF THE EXPECTED SHARE AND NUMBER OF EARLY SCHOOL LEAVERS from primary and lower secondary education (Dimensions 4 and 5)

The UIS has prepared two spreadsheets to support the calculation of the number and share of children at risk of dropping out as defined in the Out-of-School Children Initiative's Five Dimensions of Exclusion methodology. This annex explains the main components of the two spreadsheets and provides instructions for their use. These spreadsheets can be found on the OOSCI website (allinschool.org).

1. The Excel spreadsheets for the calculation of dimension 4/5 are designed to produce estimates of Dimensions 4 and 5 for multiple years.

2. The Excel spreadsheet "Cohort Flow" is an additional tool designed to visualize the flow of a fictive cohort of students. It is not designed for indicator calculation but for illustrative purposes. A brief explanation of this spreadsheet is provided at the end of this annex in the section "Description of Cohort Evolution Spreadsheet".

1. DESCRIPTION OF OOSCI CALCULATION OF DIMENSIONS 4/5 SPREADSHEET

Software requirements: The spreadsheets can be used with MS Excel.

Layout of spreadsheet: The spreadsheet is divided into three worksheets: Input, Calculation and Results.

1. Input: Features two tables for the user to insert data on enrolment and repeaters, and an optional third table for net transfer (see **Figure I1**). This worksheet calculates data for multiple years. The first year with available data is specified by entering the year in row 4 to the right of the cell "First year".

2. Calculation: Displays all steps of the calculation for users to follow the methodology to estimate Dimensions 4 and 5. This worksheet is protected and cannot be modified.

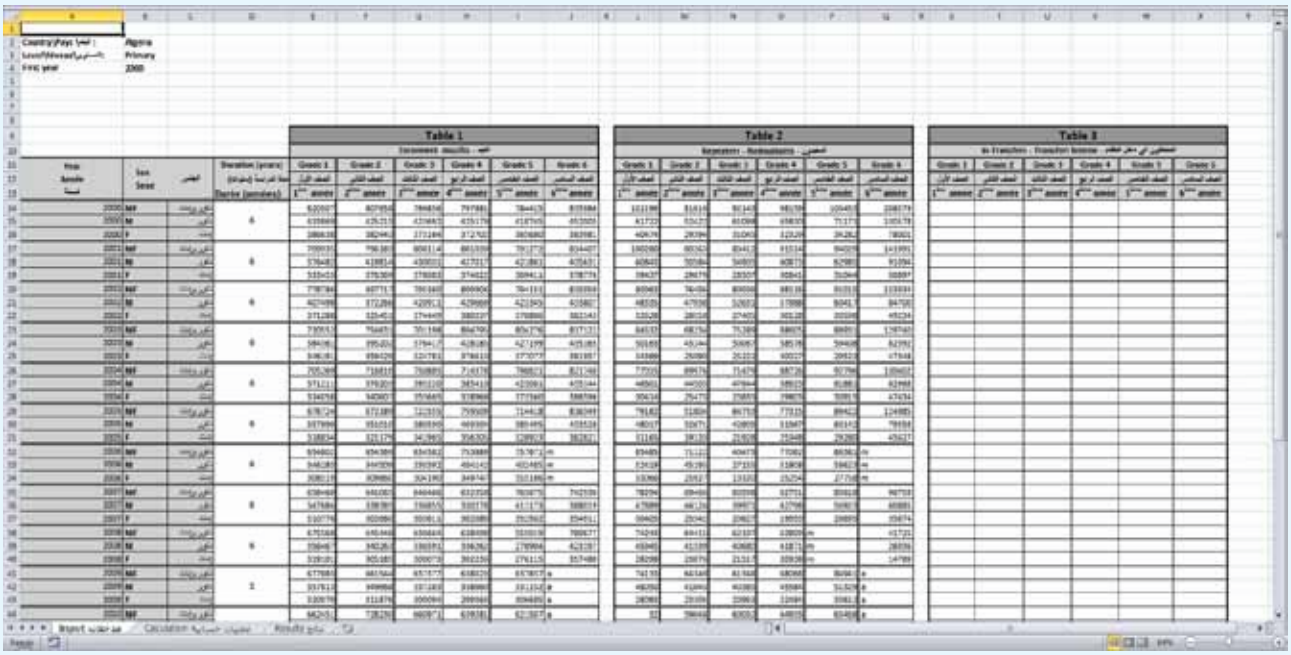
3. Results: Presents the share and number of children in the given level of education who are expected to drop out before the last grade.

The spreadsheets for Dimensions 4 and 5 are identical, except that the number of grades provided corresponds to the duration of primary and lower secondary education in the country according to the International Standard Classification of Education (ISCED).

Data requirements: To calculate the estimates for Dimensions 4 and 5, the user must have data on enrolment and repeaters by grade, for the entire duration of the given level of education, for two consecutive years. The spreadsheets were pre-filled using enrolment and repetition data from the UIS Data Centre, but users are encouraged to enter national data for the calculations. Data on net transfer ("Input" worksheet, Table 3) is optional and, if available, can improve the precision of the results. For calculation at the sub-national level (for example, a province or region), transfer data is very important.

Calculation assumptions: The spreadsheet calculations are based on a reconstructed cohort model. This model uses the progression and repetition rates by grade for two consecutive years, and projects these trends onto a fictive cohort. The advantages of this method are twofold. First, it allows the user to forecast the expected share and number of students who are

FIGURE I1: INPUT WORKSHEET FOR DATA ENTRY



expected to drop out before the last grade of the level, which is useful to planners and policy makers. Second, this method requires only two consecutive years of data. It is important to note that the method makes some simplifying assumptions:

- Progression rates remain constant throughout the cohort school life.
- The system is closed (no children enter or exit the population of the country).
- Repeaters have the same progression rates as non-repeaters.
- Children who drop out do not re-enter.

Instructions for use: Users only need to enter data in the "Input" worksheet.

In rows 2-4 of the "Input" worksheet, the user enters the country, level of education and first year with available data. The spreadsheets *[Country]_UIS_OOSCI_Calculation_of_Dim_4.xlsx* and *[Country]_UIS_OOSCI_Calculation_of_Dim_5.xlsx* are identical. The only difference is the number of grades in each spreadsheet, which correspond to the duration of primary education and lower secondary education, respectively. The user also enters data in Tables 1 and 2, with the option of entering data in Table 3. The calculation requires at least two consecutive years of enrolment and repeaters data for all grades in the given educational level.

In Table 1, the user enters data on the number of students enrolled in the given level by grade for total, male and female, for each year where data is available. Enter "m" in the cells where data is missing.

In Table 2, the user enters data on the number of repeaters in the given level by grade for total, male and female, for each year where data is available. Even in cases where repetition is minimal (for example due to a policy of automatic promotion), the spreadsheet formulas require that a positive number must be entered into Table 2. To ensure the formulas work properly, **in cases where repetition is nil, please enter 1 instead** of 0 in Table 2. Enter "m" in the cells where data is missing.

Table 3 is optional; if data is available on net transfer (in-transfer to the system minus out-transfer) into the student population from outside the country, it can be entered. It is

important to have net transfer data for the calculation of Dimension 4 and 5 estimates for sub-groups of the population, for example disaggregated by large administrative region.

After the user enters the available data in Tables 1, 2 and 3, the "Calculation" worksheet displays the calculation steps to arrive at the estimates of Dimensions 4 and 5. The following indicators are calculated: promotion rate, repetition rate, survival rate by grade, survival rate to the last grade of the level, and number and rate of dropout to the last grade. Full descriptions of most of these indicators can be accessed at the UIS Online Glossary. In addition, the formulas to calculate the data in the "Calculation" worksheet can be reviewed in Excel by clicking on the respective cells. To follow each calculation step by step in the spreadsheet, the *Evaluate Formula* function in Excel can be helpful. The "Calculation" worksheet is password protected to prevent accidental keystroke errors that could change the formulas. The password for the sheet is: OOSCI.

The spreadsheet is based on this formula: promotion rate + repetition rate + dropout rate = 100%. Due to issues of data quality, the sum of the promotion rate and the repetition rate for male or female data may exceed the theoretical maximum of 100%. In cases where the theoretical maximum is exceeded, a capping factor adjustment is applied. These cases can be identified in the "Calculation" spreadsheet where values in the "Capping factor" columns are greater than 1. The method considers the highest sum of either the promotion and repetition rate for males or the promotion and repetition rate for females as the capping factor. This capping factor is applied to the problematic promotion and repetition rates for males and females to "cap" the sum of promotion, repetition and dropout rates at 100%.

Due to small discrepancies caused by rounding and capping, in some cases the sum of the male and female values may not equal the total value for both sexes. To account for this, at the final calculation stages the spreadsheet adjusts the data such that the male value is adjusted to be the *residual* of the total – female value. This adjustment ensures that the sum of male and female values is equal to the values for both sexes for Dimensions 4 and 5.

The spreadsheet automatically adjusts the calculation to the duration of the education level in the given year. Where there is a change in the duration of the level of education from one year to the next, the results for that given year are shown as missing due to incomplete data for the calculation.
In the "Results" worksheet, the final values for Dimensions 4 and 5 are presented in the columns "Number of expected dropouts before last grade" and "Percentage of expected dropouts before last grade".

2. DESCRIPTION OF COHORT EVOLUTION SPREADSHEET

The Cohort Evolution Spreadsheet is designed as a visual aid to help understanding of the cohort flow in the given level of education. Using the promotion, repetition and dropout rates produced from data entered in the first worksheet, it visualizes the flow of students from the first grade of a given level of education until the last grade. It is designed primarily for illustrative purposes, while the OOSCI Calculation of Dimensions 4/5 Spreadsheet is designed to provide estimates for Dimension 4 and 5.

The Cohort Evolution Spreadsheet is divided into four worksheets: Calculation ("Calc"), Results for the total population ("MF"), Results for the male population ("M"), and Results for female population ("F").

1. Calc: Features tables for the user to insert data on the number of students enrolled in a given level by grade and sex in year x, and the number of students enrolled and repeating by grade and sex in year x+1. There is an optional table for net transfer data, if available. Below, this worksheet calculates promotion, repetition and dropout rates for one year only, based on the data entered. This section of the worksheet is protected and cannot be modified.

2. MF: Presents the visualization of the flow of the given cohort based on the promotion, repetition and dropout rates of the total

population (both sexes) calculated from the data entered in the "Calc" worksheet. The user can enter a value for the given cohort in the cell "Cohort size". No other data entry is required. A suggested cohort size is pre-filled at 1000, to which the promotion, repetition and dropout rates are applied.

3. M: Presents the visualization of the flow of the given cohort based on the promotion, repetition and dropout rates of the male population calculated from the data entered in the "Calc" worksheet.

4. F: Presents the visualization of the flow of the given cohort based on the promotion, repetition and dropout rates of the female population calculated from the data entered in the "Calc" worksheet.

The Cohort Evolution Spreadsheets for Dimensions 4 and 5 are identical, except that the number of grades provided corresponds to the duration of primary and lower secondary education in the country according to the International Standard Classification of Education (ISCED).

Annex J.
Data Table Plan Templates

The data tabulation plan provides a format for the presentation of quantitative results to ensure consistency across all national OOSCI studies. Descriptions of the indicators in the following tables are provided in Chapter 4, as well as the documentation that accompanies the UIS calculation spreadsheets (Typology and Dimensions 4 and 5). The tables are organized by Dimension of Exclusion, and are divided into core tables and optional tables:

Core tables are the required tables for the profiles chapter or statistical annex. They display the number and percentage of children in each of the Five Dimensions of Exclusion, as well as their characteristics.

Optional tables are complementary to the core tables, providing supplementary statistical information related to the indicators for the Five Dimensions of Exclusion.

All tables can be customized depending on data availability. Table-specific comments are provided below each table to assist the national team. Moreover, the main research questions linked to the indicators and data in each table are also provided, to support the analysis in the national OOSCI study chapter on profiles analysis. For some indicators or groups of disaggregation, it is important to note that surveys may not have large enough sample sizes to produce reliable estimates (see section Chapter 4, Step 4).

DIMENSION 1: CHILDREN OF PRE-PRIMARY AGE WHO ARE NOT IN PRE-PRIMARY OR PRIMARY EDUCATION

CORE TABLE 1: AGE-SPECIFIC ATTENDANCE RATES, BY LEVEL OF EDUCATION AND SEX

Table comments: The education levels indicated in the first row are based on the International Standard Classification of Education (ISCED). They can be modified to the education levels in the national education system. Optionally, a column for non-formal or another type of education can be added where relevant and data are available. The column "Total" therefore represents the total attendance rate in any levels or type of education for each age (row).

Research questions linked to the table: Do children attend education levels at the intended ages? At which ages is overall attendance in education the highest and the lowest? At which age does overall attendance begin to decline? Do any patterns emerge when comparing male and female attendance rates?

AGE	PRE-PRIMARY	PRIMARY	LOWER SECONDARY	UPPER SECONDARY	TERTIARY	TOTAL
MALE						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
FEMALE						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
TOTAL						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						

CORE TABLE 2: PERCENT OF PRE-PRIMARY AGE CHILDREN WHO ARE NOT IN PRE-PRIMARY OR PRIMARY EDUCATION BY SEX AND OTHER CHARACTERISTICS (DIMENSION 1)

	NOT ATTENDING SCHOOL	ATTENDING PRE-PRIMARY SCHOOL	ATTENDING PRIMARY SCHOOL	ATTENDING EITHER PRE-PRIMARY OR PRIMARY SCHOOL
MALE				
RESIDENCE				
Urban				
Rural				
WEALTH INDEX QUINTILE				
Poorest				
Second				
Middle				
Fourth				
Richest				
ETHNICITY/LANGUAGE/RELIGION				
Group 1				
Group 2				
Group 3				
CHILD LABOUR STATUS				
Child labourer				
Not child labourer				
TOTAL				
FEMALE				
RESIDENCE				
Urban				
Rural				
WEALTH INDEX QUINTILE				
Poorest				
Second				
Middle				
Fourth				
Richest				
ETHNICITY/LANGUAGE/RELIGION				
Group 1				
Group 2				
Group 3				

	NOT ATTENDING SCHOOL	ATTENDING PRE-PRIMARY SCHOOL	ATTENDING PRIMARY SCHOOL	ATTENDING EITHER PRE-PRIMARY OR PRIMARY SCHOOL
CHILD LABOUR STATUS				
Child labourer				
Not child labourer				
TOTAL				
TOTAL				
RESIDENCE				
Urban				
Rural				
WEALTH INDEX QUINTILE				
Poorest				
Second				
Middle				
Fourth				
Richest				
ETHNICITY/LANGUAGE/RELIGION				
Group 1				
Group 2				
Group 3				
CHILD LABOUR STATUS				
Child labourer				
Not child labourer				
TOTAL				

Table comments: This table shows the share of children in Dimension 1, as well as a breakdown of children who are in school and the level they attend. Pre-primary age is defined as one year before official primary entrance age, according to the Five Dimensions of Exclusion model. Caution should be taken when using data for a single age cohort, to ensure that sample sizes and the quality of age data are sufficient. Characteristics shown in the table depend on data availability.

Research questions linked to table: What percentage of pre-primary age children are excluded from education? Which groups of children at this age are most and least likely to attend school? For those pre-primary age children who are in school, what patterns exist with respect to attendance in pre-primary and primary?

OPTIONAL TABLE 1: PERCENT OF PRE-PRIMARY AGE CHILDREN WHO ARE NOT IN PRE-PRIMARY OR PRIMARY EDUCATION (DIMENSION 1)**, [YEARS WITH AVAILABLE DATA]**

	NOT ATTENDING SCHOOL	ATTENDING PRE-PRIMARY SCHOOL	ATTENDING PRIMARY SCHOOL	ATTENDING EITHER PRE-PRIMARY OR PRIMARY SCHOOL
YEAR				
YEAR				
YEAR				
YEAR				

Table comments: This table shows the historical trend in the share of children in Dimension 1. Pre-primary age is defined as one year before official primary entrance age, according to the Five Dimensions of Exclusion model. If data for different years are drawn from different data sources (different household surveys, for example), the comparability and quality of the data must be considered. Caution should be used when using data for a single age cohort, to ensure that sample sizes and the quality of age data are sufficient.

Research questions linked to table: How has the share of pre-primary age children excluded from education evolved over time? How has the share of children in pre-primary and primary education evolved over time?

DIMENSION 2: CHILDREN OF PRIMARY SCHOOL AGE WHO ARE NOT IN PRIMARY OR SECONDARY SCHOOL

CORE TABLE 3: PERCENT AND NUMBER OF PRIMARY SCHOOL-AGE CHILDREN OUT OF SCHOOL, BY AGE, SEX AND OTHER CHARACTERISTICS (DIMENSION 2)

	MALE		FEMALE		TOTAL	
	%	Number out of school	%	Number out of school	%	Number out of school
AGE						
6						
7						
8						
9						
10						
11						
RESIDENCE						
Urban						
Rural						
WEALTH INDEX QUINTILE						
Poorest						
Second						
Middle						
Fourth						
Richest						
ETHNICITY/LANGUAGE/RELIGION						
Group 1						
Group 2						
Group 3						
CHILD LABOUR STATUS						
Child labourer						
Not child labourer						
TOTAL						

Table comments: This table shows the number and percentage of children in Dimension 2, by various socio-demographic characteristics. The ages in this table should reflect the primary education age range. Characteristics shown in the table depend on data availability.

Research questions linked to table: What percentage of primary-age children does not attend primary or secondary education? Which groups of children at this age are most and least likely to attend school?

OPTIONAL TABLE 2: PERCENT OF PRIMARY-AGE CHILDREN WHO ATTENDING EDUCATIONAL PROGRAMMES, BY AGE, SEX AND OTHER CHARACTERISTICS

	ATTENDING FORMAL EDUCATION:			ATTENDING NON-FORMAL EDUCATION (NFE):			
	Attending pre-primary school	Attending primary school	Attending secondary education	Attending NFE which is considered equivalent to formal education	Attending NFE which is not considered equivalent to formal education	Attending formal education or NFE considered equivalent to formal education	Not attending any type of formal school or NFE equivalent
AGE							
6							
7							
8							
9							
10							
11							
RESIDENCE							
Urban							
Rural							
WEALTH INDEX QUINTILE							
Poorest							
Second							
Middle							
Fourth							
Richest							
ETHNICITY/LANGUAGE/RELIGION							
Group 1							
Group 2							
Group 3							
CHILD LABOUR STATUS							
Child labourer							
Not child labourer							
TOTAL							

Table comments: This table shows the share of primary-age children who attend different kinds of formal and non-formal educational programmes (see Chapter 2 on non-formal education). This table is designed for countries that wish to exclude primary age children in pre-primary and non-formal programmes (considered equivalent to formal schooling) in their out-of-school estimate. It is an alternative presentation of Dimension 2. Where data on non-formal education are not available, the table could be modified to show only children in pre-primary, primary and secondary school as in school. Caution should be used when using data for a single age cohort, to ensure that sample sizes and the quality of age data are sufficient.

Research questions linked to table: What share of the primary school-age population is enrolled in primary and secondary education? What share is enrolled in pre-primary education, or in non-formal programmes? What share of primary age children are considered "out of school" according to the international definition who are in pre-primary education?

CORE TABLE 4: PERCENT AND NUMBER OF PRIMARY SCHOOL-AGE CHILDREN OUT OF SCHOOL (DIMENSION 2)**, [YEARS WITH AVAILABLE DATA]**

	MALE		FEMALE		TOTAL	
	%	Number out of school	%	Number out of school	%	Number out of school
YEAR						
YEAR						
YEAR						
YEAR						

Table comments: This table shows the historical trend in the share and number of children in Dimension 2. If data for different years are drawn from different data sources (different household surveys, for example), the comparability and quality of the data must be considered. This table can be completed with administrative or household survey data. The population data source used in the calculation of the number of out-of-school children should be indicated in the table's source notes.

Research questions linked to the table: How has the share and number of primary-age out-of-school children evolved over time? Do any patterns emerge when comparing male and female out-of-school rates?

CORE TABLE 5: SCHOOL EXPOSURE OF PRIMARY-AGE OUT-OF-SCHOOL CHILDREN, BY SEX

	MALE	FEMALE	TOTAL
	%	%	%
School exposure			
Left school			
Expected to enter in the future			
Expected to never enter			

Table comments: This table displays the breakdown of the primary-age out-of-school children population into three groups based on past and future school exposure. The data source for this table is household-survey based calculations from the Typology calculation spreadsheet produced by the UIS. It is possible to modify or expand the socio-demographic characteristics depending on the availability of data. More information about these categories of school exposure and the calculation method can be found in Chapter 4, Step 4 and Annex G.

Research questions linked to table: What is the most common school exposure category for primary-age out-of-school children? Which groups of primary-age out-of-school children are most likely to never enter school?

DIMENSION 3: CHILDREN OF LOWER SECONDARY SCHOOL AGE WHO ARE NOT IN PRIMARY OR SECONDARY SCHOOL

CORE TABLE 6: PERCENT AND NUMBER OF LOWER SECONDARY SCHOOL-AGE CHILDREN OUT OF SCHOOL, BY AGE, SEX AND OTHER CHARACTERISTICS (DIMENSION 3)

	MALE		FEMALE		TOTAL	
	%	Number out of school	%	Number out of school	%	Number out of school
AGE						
12						
13						
14						
RESIDENCE						
Urban						
Rural						
WEALTH INDEX QUINTILE						
Poorest						
Second						
Middle						
Fourth						
Richest						
ETHNICITY/LANGUAGE/RELIGION						
Group 1						
Group 2						
Group 3						
CHILD LABOUR STATUS						
Child labourer						
Not child labourer						
TOTAL						

Table comments: This table shows the number and percentage of children in Dimension 3, by various socio-demographic characteristics. The ages in this table should reflect the lower secondary education age range. Characteristics shown in the table depend on data availability.

Research questions linked to table: What percentage of lower secondary-age children does not attend primary or secondary education? Which groups of children at this age are most and least likely to attend school?

CORE TABLE 7: PERCENT AND NUMBER OF PRIMARY SCHOOL-AGE CHILDREN OUT OF SCHOOL (DIMENSION 2)**, [YEARS WITH AVAILABLE DATA]**

	MALE		FEMALE		TOTAL	
	%	Number out of school	%	Number out of school	%	Number out of school
YEAR						
YEAR						
YEAR						
YEAR						

Table comments: This table shows the historical trend in the share and number of children in Dimension 3. If data for different years are drawn from different data sources (different household surveys, for example), the comparability and quality of the data must be considered. This table can be completed with administrative or household survey data. The population data source used in the calculation of the number of out-of-school children should be indicated in the table's source notes.

Research questions linked to the table: How has the share and number of lower secondary age out-of-school children evolved over time? Do any patterns emerge when comparing male and female out-of-school rates?

CORE TABLE 8: SCHOOL EXPOSURE OF LOWER SECONDARY-AGE OUT-OF-SCHOOL CHILDREN, BY SEX

	MALE	FEMALE	TOTAL
	%	%	%
School exposure			
Left school			
Expected to enter in the future			
Expected to never enter			

Table comments: This table displays the breakdown of the lower secondary age out-of-school children population into three groups based on past and future school exposure. The data source for this table is household-survey based calculations from the Typology calculation spreadsheet produced by the UIS. It is possible to modify or add the socio-demographic characteristics depending on the availability of data. More information about these categories of school exposure and the calculation method can be found in Chapter 4, Step 4 and Annex G.

Research questions linked to table: What is the most common school exposure category for lower secondary age out-of-school children? Which groups of lower secondary-age out-of-school children are most likely to never enter school? How do the school exposure patterns of lower secondary age out-of-school children compare to those of primary age out of school children?

DIMENSION 4: CHILDREN WHO ARE IN PRIMARY EDUCATION BUT AT RISK OF DROPPING OUT

OPTIONAL TABLE 3: SURVIVAL RATE TO THE LAST GRADE OF PRIMARY EDUCATION

	MALE	FEMALE	TOTAL	GPI
Survival rate to the last grade of primary education (%)				

Table comments: This table displays the percentage of a cohort of students enrolled in the first grade of primary education in a given school year who are expected to reach the last grade of primary education, with or without repetition. It can be calculated from administrative or household survey data.

Research questions linked to table: What share of new entrants will eventually reach the last grade of primary education, and what share will drop out before reaching the last grade? Do any patterns emerge when comparing male and female survival rates?

CORE TABLE 9: PERCENT AND NUMBER OF CHILDREN IN PRIMARY EDUCATION EXPECTED TO DROP OUT BEFORE THE LAST GRADE (DIMENSION 4), [YEARS WITH AVAILABLE DATA]

	MALE		FEMALE		TOTAL	
	%	Number expected to drop out	%	Number expected to drop out	%	Number expected to drop out
YEAR						
YEAR						
YEAR						
YEAR						

Table comments: This table presents the percentage and number of children in Dimension 4. The data source for this table is administrative-based calculations from the Dimension 4 calculation spreadsheet described in Annex I.

Research questions linked to table: What share and how many children in primary education are at risk of dropping out from primary education? How has the share and number of primary students at risk of dropping out evolved over time? Do any patterns emerge when comparing male and female expected dropout rates?

OPTIONAL TABLE 4: PERCENT AND NUMBER OF NEW ENTRANTS TO PRIMARY EDUCATION WITHOUT EARLY CHILDHOOD EDUCATION, BY SEX AND OTHER CHARACTERISTICS

	MALE		FEMALE		TOTAL	
	%	Number of children	%	Number of children	%	Number of children
RESIDENCE						
Urban						
Rural						
WEALTH INDEX QUINTILE						
Poorest						
Second						
Middle						
Fourth						
Richest						
ETHNICITY/LANGUAGE/RELIGION						
Group 1						
Group 2						
Group 3						
CHILD LABOUR STATUS						
Child labourer						
Not child labourer						
TOTAL						

Table comments: This table displays the percentage and number of new entrants to primary education (in grade 1) who do not have previous experience in early childhood education. It represents a proxy indicator to measure "school readiness", a factor linked to increased risk of dropping out. Characteristics shown in the table depend on data availability.

Research questions linked to the table: What share and number of children have an increased risk of dropping out due to lack of experience in early childhood education? Which groups of children are most and least likely to benefit from early childhood education?

OPTIONAL TABLE 5: PERCENT OF CHILDREN IN PRIMARY EDUCATION WHO ARE UNDERAGE, AT THE OFFICIAL AGE, OR OVERAGE FOR THEIR GRADE, BY SEX AND OTHER CHARACTERISTICS

	MALE	FEMALE	TOTAL
	%	%	%
Underage			
Official age			
Official age + 1 year			
Overage (2 or more years)			

Table comments: This table displays the share of primary students in relation to their ages and the grades they attend. It identifies the extent of overage attendance, a factor linked to increased risk of dropping out. Note that only children who are two or more years overage for the grade they attend are considered overage. Characteristics shown in the table can be modified or expanded, to compare the age-grade patterns of students by household wealth, location or other characteristics.

Research questions linked to the table: What share and number of children have an increased risk of dropping out due to being two or more years overage? Which groups of children in primary education are most and least likely to be overage for their grade?

DIMENSION 5: CHILDREN WHO ARE IN LOWER SECONDARY EDUCATION BUT AT RISK OF DROPPING OUT

OPTIONAL TABLE 6: SURVIVAL RATE TO THE LAST GRADE OF LOWER SECONDARY EDUCATION

	MALE	FEMALE	TOTAL	GPI
Survival rate to the last grade of lower secondary education (%)				

Table comments: This table displays the percentage of a cohort of students enrolled in the first grade of lower secondary education in a given school year who are expected to reach the last grade, with or without repetition. It can be calculated from administrative or household survey data.

Research questions linked to table: What share of new entrants will eventually reach the last grade of lower secondary education, and what share will drop out before reaching the last grade? Do any patterns emerge when comparing male and female survival rates?

CORE TABLE 10: PERCENT AND NUMBER OF CHILDREN IN LOWER SECONDARY EDUCATION EXPECTED TO DROP OUT BEFORE THE LAST GRADE OF LOWER SECONDARY EDUCATION (DIMENSION 5)**, [YEARS WITH AVAILABLE DATA]**

	MALE		FEMALE		TOTAL	
	%	Number expected to drop out	%	Number expected to drop out	%	Number expected to drop out
YEAR						
YEAR						
YEAR						
YEAR						

Table comments: This table presents the percentage and number of children in Dimension 5. The data source for this table is administrative-based calculations from the Dimension 5 calculation spreadsheet described in Annex I.

Research questions linked to table: What share and how many children in lower secondary education are at risk of dropping out from lower secondary education? How has the share and number of lower secondary students at risk of dropping out evolved over time? Do any patterns emerge when comparing male and female expected dropout rates?

OPTIONAL TABLE 7: PERCENT OF CHILDREN IN LOWER SECONDARY EDUCATION WHO ARE UNDERAGE, AT THE OFFICIAL AGE, OR OVERAGE FOR THEIR GRADE, BY SEX AND OTHER CHARACTERISTICS

	MALE	FEMALE	TOTAL
	%	%	%
Underage			
Official age			
Official age + 1 year			
Overage (2 or more years)			

Table comments: This table displays the share of lower secondary students in relation to their ages and the grades they attend. It identifies the extent of overage attendance, a factor linked to increased risk of dropping out. Note that only children who are two or more years overage for the grade they attend are considered overage. Characteristics shown in the table can be modified or expanded, to compare the age-grade patterns of students by household wealth or location.

Research questions linked to the table: What share and number of children have an increased risk of dropping out due to being two or more years overage? Which groups of children in lower secondary education are most and least likely to be overage for their grade?

OPTIONAL TABLES FOR CHILD LABOUR *(SEE ANNEX K)*

OPTIONAL TABLES FOR UPPER SECONDARY EDUCATION

OPTIONAL TABLE 8: SCHOOL ATTENDANCE OF UPPER SECONDARY AGE YOUTH, BY LEVEL OF EDUCATION, SEX AND OTHER CHARACTERISTICS

	Not attending school	Attending primary school (ISCED 1)	Attending lower secondary (ISCED 2)	Attending upper secondary (ISCED 3)	Attending post-secondary non-tertiary (ISCED 4)	Attending tertiary (ISCED 5,6,7,8)
MALE						
AGE						
15						
15						
17						
RESIDENCE						
Urban						
Rural						
WEALTH INDEX QUINTILE						
Poorest						
Second						
Middle						
Fourth						
Richest						
ETHNICITY/LANGUAGE/RELIGION						
Group 1						
Group 2						
Group 3						
EMPLOYMENT STATUS						
In employment						
Not in employment						
TOTAL						

	Not attending school	Attending primary school (ISCED 1)	Attending lower secondary (ISCED 2)	Attending upper secondary (ISCED 3)	Attending post-secondary non-tertiary (ISCED 4)	Attending tertiary (ISCED 5,6,7,8)
FEMALE						
AGE						
15						
15						
17						
RESIDENCE						
Urban						
Rural						
WEALTH INDEX QUINTILE						
Poorest						
Second						
Middle						
Fourth						
Richest						
ETHNICITY/LANGUAGE/RELIGION						
Group 1						
Group 2						
Group 3						
EMPLOYMENT STATUS						
In employment						
Not in employment						
TOTAL						
TOTAL						
AGE						
15						
15						

	Not attending school	Attending primary school (ISCED 1)	Attending lower secondary (ISCED 2)	Attending upper secondary (ISCED 3)	Attending post-secondary non-tertiary (ISCED 4)	Attending tertiary (ISCED 5,6,7,8)
17						
RESIDENCE						
Urban						
Rural						
WEALTH INDEX QUINTILE						
Poorest						
Second						
Middle						
Fourth						
Richest						
ETHNICITY/LANGUAGE/RELIGION						
Group 1						
Group 2						
Group 3						
EMPLOYMENT STATUS						
In employment						
Not in employment						
TOTAL						

Table comments: The education levels indicated in the first row are based on the International Standard Classification of Education (ISCED). They can be modified to the education levels in the national education system. Optionally, a column for non-formal or another type of education (for example, distinguishing general from technical and vocational secondary education) can be added where relevant and data are available. The column "Total" therefore represents the total attendance rate in any levels or type of education for each subgroup of upper secondary age youth.

Research questions linked to the table: What share of upper secondary age youth attends school? Which groups of children at this age are most and least likely to attend school? Do any patterns emerge when comparing male and female attendance rates?

OPTIONAL TABLE 9: EDUCATIONAL ATTAINMENT OF UPPER SECONDARY AGE YOUTH NOT IN SCHOOL, BY LEVEL OF EDUCATION, SEX AND OTHER CHARACTERISTICS

	No formal schooling, or Pre-primary (ISCED 0)	Incomplete primary	Primary (ISCED 1)	Incomplete lower secondary
AGE				
15				
15				
17				
RESIDENCE				
Urban				
Rural				
WEALTH INDEX QUINTILE				
Poorest				
Second				
Middle				
Fourth				
Richest				
ETHNICITY/LANGUAGE/RELIGION				
Group 1				
Group 2				
Group 3				
EMPLOYMENT STATUS				
In employment				
Not in employment				
TOTAL				

Table comments: This table breaks down the educational attainment of the population that is not currently in school (column “Not attending school” in optional table 8). The education levels indicated in the first row are based on the International Standard Classification of Education (ISCED). They can be modified to the education levels in the national education system. Optionally, a column for non-formal or other types of education can be added where relevant and if data are available.

Research questions linked to the table: What is the most common educational attainment of upper secondary age youth not in school? Are there differences between groups (urban, rural, male, female, or richest and poorest)?

Lower Secondary (ISCED 2)	Upper secondary (ISCED 3)	Post-secondary non-tertiary (ISCED 4)	Tertiary (ISCED 5,6,7,8)	Unknown

OPTIONAL TABLE 10: SHARE AND NUMBER OF UPPER SECONDARY AGE YOUTH IN EDUCATION, EMPLOYMENT AND TRAINING, BY SEX

	MALE		FEMALE		TOTAL	
	%	Number	%	Number	%	Number
In education only						
In employment or training only						
In education and employment						
Not in education, employment or training						

Table comments: This table examines the share and number of upper secondary age youth who are enrolled in education, employed, or in training. Depending on the data source the information on the share and number of this age group in training may be available. Those youth who are not in education, employment or training (commonly called NEETs) are listed in the final column.

Research questions linked to the table: What share of upper secondary age youth is in school, what share is in employment, and what share is in both? What share of the upper secondary age population is not in education, employment or training? Are there different patterns between males and females?

Annex K.
Child labour and out-of-school children: a statistical profile

CHILD LABOUR AND OUT-OF-SCHOOL CHILDREN: A STATISTICAL PROFILE

INTRODUCTION

The child labour phenomenon is closely related to that of out-of-school children. The majority of children not in school are engaged in some form of work activity, and, for children in school, involvement in work makes them more susceptible to premature drop-out. Understanding the interplay between child labour and out-of-school children is therefore critical to achieving both Education for All (EFA) and child labour elimination goals.

The current guidance note presents a comprehensive statistical profile of child labourers and out-of-school children. Such a profile is an essential starting point for the design of effective policy strategies for achieving the goals of EFA and child labour elimination.

The descriptive indicators contained in the profile are designed to provide not only robust estimates of how many child labourers and out-of-school children there are, but also detailed information on who they are, how they overlap, where they live, what they do and the characteristics of the households they belong to.

DEFINING CHILD LABOUR

Child labour is a legal rather than a statistical concept, and the international legal standards that define it are therefore the necessary frame of reference for child labour statistics. Three principal international conventions on child labour, set the legal boundaries for child labour, and provide the legal basis for national and international actions against it:

- ILO Convention No. 138 (Minimum Age for Admission to Employment) (C138)
- United Nations Convention on the Rights of the Child (CRC); and
- ILO Convention No. 182 (Worst Forms of Child Labour) (C182)

But the translation of these broad legal norms into statistical terms for measurement purposes is by no means straightforward. The international legal standards contain a number of flexibility clauses left to the discretion of the competent national authority in consultation (where relevant) with worker and employer organizations (e.g., minimum ages, scope of application). This means that there is no single legal definition of child labour across countries, and concomitantly, no single standard statistical measure of child labour consistent with national legislation across countries.

The resolution on child labour statistics adopted at the 18th International Conference of Labour Statisticians (ICLS) in 2008 provides a first-ever set of global standards for translating the international legal standards on child labour into statistical terms. See: http://www.ilo.org/ipec/ChildlabourstatisticsSIMPOC/ICLSandchildlabour/lang--en/index.htm.

The ICLS resolution states that child labour may be measured in terms of the engagement of children in productive activities on the basis of the general production boundary. The general production boundary is a broad concept encompassing all activities whose performance can be delegated to another person with the same desired results. This includes unpaid household services (household chores) that are outside the more narrow System of National Accounts (SNA) production boundary.

Even though largely based on the measurement guidelines contained in the 18th ICLS resolution, it is recommended to limit the scope of child labour analysis in a national OOSCI study to children from the starting age of compulsory education (usually 6 years) up to the minimum age for admission to employment. In the case of a country where compulsory education begins at 6 years, the child labour measures used comprise three groups of children:

6- to 11-year-olds in economic activity (i.e. those engaged in any activity falling within the SNA production boundary for at least one hour during the reference week). Economic activity covers children in all market production and in certain types of non-market production, including production of goods for own use. It includes forms of work in both the formal and informal sectors, as well as forms of work both inside and outside family settings);

12- to 14-year-olds in non-light (or "regular") economic activity (i.e. those engaged in any activity falling within the SNA production boundary for 14 or more hours during the reference week); and

6- to 14-year-olds in hazardous unpaid household services (i.e. defined for the scope of the report as those engaged in the production of domestic and personal services for consumption within their own household, commonly called "household chores", for at least 28 hours during the reference week).

Because of data limitations, the following group, which forms an integral part of child labour, is typically not considered in OOSCI reports: children aged 15-17 in hazardous work.

The first two groups relate to ILO Convention 138, which stipulates a minimum age of generally 15 years (possibly 14 years as an exception in less developed countries) for admission to employment or work (art. 2), but states that national laws may permit the work of persons from age 13 (or even 12 years) in light work (art. 7). In determining the hours threshold for permissible light work, which is not defined explicitly in C138, the ICLS resolution recommends a cut-off point of 14 hours during the reference week, below which non-hazardous work can be considered permissible light work. It should be noted that due to data limitations, which make it difficult to identify hazardous work, the second group of child labourers does not include those children working for less than 14 hours per week in hazardous work.

The inclusion of the third group marks recognition of the fact that the international legal standards do not rule out a priori children's production outside the system of national accounts production boundary from consideration in child labour measurement. The ICLS resolution, building on this recognition, opened the way for classifying those performing hazardous unpaid household services – where the general production boundary is taken as the measurement framework for measuring child labour - as part of the group of child labourers for measurement purposes.

The ICLS resolution does not recommend a specific hours threshold for classifying household chores as hazardous (and therefore as child labour), and cites establishing hazardousness criteria as an area requiring further conceptual and methodological development. In the absence of detailed statistical criteria for hazardousness, a threshold of 28 weekly working hours is applied, above which performance of household chores is classified as child labour. It should be kept in mind, however, that this threshold is based only on preliminary evidence of the interaction between household chores and school attendance, and does not constitute an agreed measurement standard.

The child labour indicator utilized to develop a profile of child labourers and out-of-school children, therefore, represents a benchmark for international comparative purposes, but, is not necessarily consistent with national child labour legislation (and estimates based on such legislation), owing to the flexibility clauses contained in the international legal standards.

STATISTICAL PROFILE

A set of core descriptive indicators for creating an in-depth statistical profile of child labourers and out-of-school children is presented below. The development of complex profiles of out-of-school children and child labourers involves systematically disaggregating these populations

according to a range of individual, household and group characteristics. It also involves linking the child labour and OOSC populations with indicators of marginalization and inequality, such as sex, wealth, location, education and ethnicity. The profile of child labourers and out-of-school children considers children in the age range 6-14 years or, data allowing, 6-15 years, according to the minimum age of admission to employment of each country. As child labour is a cross-cutting problem among primary and lower secondary age children, figures are presented for the entire age range 6-14 (or 6-15).

The indicators presented in the following tables provide a general picture of the degree to which the **child labour and OOSC populations overlap**.

They address answer the following questions:

- What proportion of children is involved in child labour?
- What proportion of children is out of school?
- To what degree do the child labour and OOSC populations overlap?
- What work activities do out-of-school children perform?
- Does child labour interfere with education?
- What are the household characteristics of child labourers and out-of-school children?

  Detailed disaggregation of the indicators will help pinpoint specific sub-groups of children that may be at particular risk of being exposed to child labour and denied schooling. These may include individual characteristics (e.g., male or female children, ethnic minorities, children living in particular regions) or household characteristics reflecting vulnerability (e.g., wealth quintile) or other household background characteristics (e.g., household head's education). Examples of analyses of factors associated with child labour can be found in the country reports on child labour produced by the Understanding Children's Work (UCW) programme, an inter-agency research initiative of the International Labour Organization (ILO), UNICEF and the World Bank.

  While they fall short of establishing a robust causal link between child labour and children out of school, the indicators will nonetheless serve to illustrate the degree of incompatibility between child labour, on the one hand, and school participation, on the other.

- What proportion of children is involved in child labour?

  Table CL.1 reports children's involvement in child labour, defined in accordance with the discussion above, as well as children's involvement in economic activity and household chores, for the 5-11, 12-4 and 5-14 years age groups. The table disaggregates economic activity by whether or not the work takes place within the household, and, in the case of non-family work, whether it is paid or non-paid.

  Table CL.1 addresses the overall question of what proportion of children is involved in child labour. The table helps to highlight not only what is the proportion of children involved in child labour, but also which characteristics are correlated with being involved in child labour.

The following are some guidance questions of potential use in drawing conclusions from the table results:

- Is there a sex bias? Is child labour mainly a male or female phenomenon? Do sex considerations appear relevant in the types of child labour performed by children? *In many contexts the nature of the work performed by children differs in accordance with traditional social roles. Girls typically shoulder a greater responsibility for household chores while boys are more involved in performing economic activities, particularly outside of the household.*
- Does area of residence matter? Is child labour primarily a rural phenomenon? Are child labourers concentrated in some regions compared to others? What do geographic disparities in child labour levels say about the need for targeting of child labour interventions?

In most developing country contexts, child labour is much more common in rural than in urban areas. This can be explained by various factors, including the important role played by children in the agriculture sector, poorer basic services infrastructure in rural areas, and limited access to schooling as an alternative to child labour in rural areas.

- Is there a correlation between household wealth and child labour? *In most contexts, there is a negative relationship between child labour and wealth quintile, i.e., higher wealth quintiles are associated with lower levels of child labour. This is not surprising, as better off households are typically less in need of their children's productivity or wages in order to make ends meet. There can be exceptions to this negative correlation, however: households with land holdings, for example, may have greater need for their children's labour to work the land.*

- Is there a correlation between the education level of the household head (or of the mother/father) and child labour? *In most contexts there is a negative correlation between the two variables, i.e., higher levels of household head's education are associated with lower levels of child labour. This can be in part the product of a disguised income effect; in other words, more educated household heads also tend to be wealthier. It also may be that better educated households are more aware of the returns to education, or are in a better position to help their children exploit the earning potential acquired through education.*

- Is there a correlation between ethnicity and child labour? *A positive correlation between ethnicity and child labour may point to a broader pattern of discrimination or marginalization of ethnic minorities. The absence of mother-tongue schooling can be a particular factor in keeping ethnic minority children out of school and in child labour.*

TABLE K1: CHILD LABOUR

	Percentage of children involved in economic activity for at least 1 hour			% of children aged 12-14 in economic activity for 14 hrs or more	Percentage of children aged 6-14 years in household chores for 28 hours or more	Percentage of children aged 6-14 years in child labour 1
	% of children aged 6-11 in economic activity	% children aged 12-14 in economic activity	% of children aged 6-14 in economic activity			
TOTAL SEX						
Male						
Female						
REGION						
Region 1						
Region 2						
Region 3						
AREA						
Urban						
Rural						

HOUSEHOLD HEAD EDUCATION						
None						
Primary						
Secondary and higher						
WEALTH INDEX QUINTILE						
Poorest						
Second						
Middle						
Fourth						
Richest						
Note: See section on Child Labour for the definition of children in child labour						

Table K2 addresses the overall question of what proportion of children is involved in employment only, is studying unencumbered by work responsibilities, or is in employment and school at the same time. This helps to further study the interplay between children's work, school and out-of-school.

One way of viewing the interplay between children's employment and schooling is by disaggregating the child population into four non-overlapping activity groups – children in employment exclusively, children attending school exclusively, children combining both activities and children doing neither.

The following are some guidance questions of potential use in drawing conclusions from the table results:

- How many children are working without also going to school? How many children are neither working nor studying? Which share of out-of-school children is made up from children working only or neither working nor studying? Is there a gender bias? Does the area of residence matter? Is one (or more than one) of the four non-overlapping activities predominantly a rural or an urban phenomenon?
- What proportion of children is out of school?

Table K3 (column A) reports the percentage of children out of school. The table addresses the overall question of what proportion of children are out of school, as well as the question of which child, household and community background characteristics are correlated with exclusion from education.

The following are some guidance questions of potential use in drawing conclusions from the results reported in Table K3 (column A):

- Are girls more or less likely to be out of school than boys? Do gender considerations appear relevant in household decisions to keep children from school? *In many contexts, girls face a greater risk of being denied schooling because of traditional social attitudes towards female education.*
- Does area of residence matter in terms of the risk of denied schooling? Is denied schooling primarily a rural phenomenon? Are out-of-school children concentrated in some regions compared to others? What do geographic disparities in levels of out-of-school children say about the need for targeting of schooling interventions? *In most developing country contexts, the phenomenon of out-of-school children is much more common in rural than*

TABLE K2. CHILD ACTIVITY STATUS BY SEX AND RESIDENCE, 6-14 YEARS AGE GROUP PERCENTAGES

Background characteristics	Mutually exclusive activity categories				(a)&(c)	(b)&(c)	(a)&(d)
	(a) Only employment	(b) Only schooling	(c) Employment and schooling	(d) Neither activity	Total in employment	Total in school	Total out of school
SEX							
Male							
Female							
RESIDENCE							
Urban							
Rural							
TOTAL							

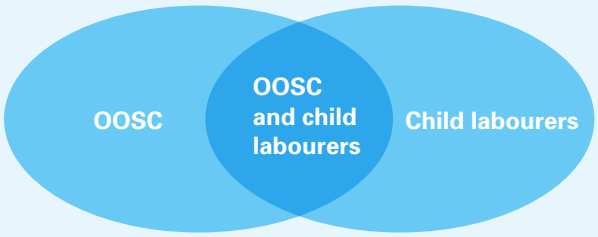
in urban areas. This can be explained by various factors, including the important role played by children in the agriculture sector, poorer basic services infrastructure in rural areas which increases the value of children's time outside the classroom, and limited access to schooling.

- Is there a correlation between household wealth and denied schooling? *In most contexts, there is a negative relationship between denied schooling and wealth quintile, i.e., higher wealth quintiles are associated with lower levels of denied schooling. This is not surprising, as better off households are typically less in need of their children's productivity or wages in order to make ends meet and the opportunity cost of schooling is therefore lower. There can be exceptions to this negative correlation, however: households with land holdings, for example, may have greater need of their children's labour to work the land.*

- Is there a correlation between the level of education of the household head or the parents and denied schooling? *In most contexts there is a negative correlation between the two variables, i.e., higher levels of household education are associated with lower levels of denied schooling. This can be in part the product of a disguised income effect; in other words, more educated household heads also tend to be wealthier. It also may be that better educated households are more aware of the returns to education, or are in a better position to help their children exploit the earning potential acquired through education.*

- To what degree do the child labour and out-of-school children populations overlap?

- How are the OOSC and child labour phenomena related? The intersection of the OOSC and child labour groups can be expressed in two different ways: first, the extent to which the OOSC population is composed of child labourers and second, the extent to which child labourers are out of school.



These two indicators offer different ways of viewing the interplay between the OOSC and child labour groups. The first indicator, out-of-school child labourers expressed as a percentage of the child labour population, offers insight into the social cost of child labour in terms of denied schooling. The second indicator, out-of-school child labourers expressed as a percentage of the total out-of-school children population, offers some insight into the importance of child labour as a factor in children being out of school.

Table K3 addresses also the question of what proportion of child labourers is out of school. Column A reports children out of school expressed as a percentage of the total number of children. Column B reports child labourers expressed as a percentage of the total number of children, and column C reports out-of-school child labourers expressed as a percentage of the total number of child labourers.

Column D of Table K3 addresses the reverse question of what proportion of out-of-school children is in child labour. Column D reports out-of-school child labourers expressed as a percentage of the total number of out-of-school children.

Columns C and D offer two different ways of looking at the overlap between the child labour and OOSC populations. Column C provides some indication of the social cost of child labour in terms of denied schooling, while column D provides some insight into the importance of child labour as a factor in children being out of school. But again, however, it should be recalled that these descriptive indicators cannot be interpreted as evidence of a causal link between child labour and out-of-school children (in either direction). The disaggregation of these indicators by different individual and household background characteristics can be used to build a profile of child labourers who are out of school and of out-of-school children who are in child labour.

The following are some guidance questions of potential use in drawing conclusions from the results reported in Table K3:

- To what extent are child labourers denied schooling? *The indicator presented in column C reports the proportion of child labourers who are out of school. A high estimate is an indication that child labour and schooling are primarily mutually exclusive activities, and that most working children have either dropped out of school or never entered. Again, the indicator offers some initial insight into the cost of child labour in terms of foregone schooling.*

- To what extent is the ability of child labourers to attend school correlated with various child, household and community background factors? Background factors can not only affect child labour involvement but also the extent to which child labour interferes with children's ability to attend school. Are female child labourers more or less likely to attend school than male child labourers? Are rural child labourers more or less likely to attend school than urban child labourers? Are younger child labourers more or less likely to attend school than older child labourers? Are child labourers with educated mothers more or less likely to attend school than child labourers with uneducated mothers? Are child labourers from wealthier households more or less likely to attend school than child labourers from poor households? Are child labourers from ethnic or religious minorities more or less likely to attend school than other child labourers? *Again, however, caution is necessary in making causal interpretations. For example, a finding that female child labourers are less likely to attend school than male child labourers may not be a product of gender per se, but rather of the fact that girls and boys perform different types of child labour, and that these different types of child labour are more or less compatible with schooling.*

The following are some guidance questions of potential use in drawing conclusions from the results reported in Column D of Table K3:

TABLE K3: CHILD LABOUR AND OUT-OF-SCHOOL CHILDREN
INTERPLAY BETWEEN CHILD LABOUR AND OUT-OF-SCHOOL CHILDREN: CHILDREN AGED 6-14

	(A) Percentage of children out of school	B) Percentage of children in child labour	(C) Percentage of children in child labour who are out of school [1]	(D) Percentage of children out of school who are involved in child labour [2]
TOTAL				
SEX				
Male				
Female				
REGION				
Region 1				
Region 2				
Region 3				
AGE				
6-11 years				
12-14 years				
AREA				
Urban				
Rural				
HOUSEHOLD HEAD EDUCATION				
None				
Primary				
Secondary and higher				
WEALTH INDEX QUINTILE				
Poorest				
Second				
Middle				
Fourth				
Richest				

1. The numerator to estimate the percentage of children in child labour who are out of school includes children aged 6-15 out of school who, during the week preceding the survey, were involved in child labour (see the guidance note for definitions of children in child labour). The denominator is the total number of children in child labour.
2. The numerator to estimate the percentage of children out of school who are involved in child labour includes children aged 6-15 out of school who, during the week preceding the survey, were involved in child labour (see the guidance note for the definition of children in child labour). The denominator is the total number of children out of school.

- To what extent are out-of-school children involved in child labour? *The indicator reports the proportion of out-of-school children who are in child labour. A high estimate indicates that most out-of-school children must work, in turn pointing to the likely importance of child labour in pulling children from school. A low estimate, on the other hand, would suggest that children are dropping out of (or never entering) school for reasons other than work. In the latter case, school-related "push" factors may be more important in explaining children's absence from school.*

  We would expect this indicator to be especially high for older children (12-14 years) for two main reason. The first is that the involvement in child labour increases with the age of the child. The second reason is that when children are closer to the end of primary education, the probability of dropping out and entering the labour market increases.

  A low proportion of out-of-school children in child labour raises the issue of "inactive" children, i.e., those neither in school nor in work. This inactive group can sometimes be even more disadvantaged than their working counterparts, benefiting neither from school nor from the learning by doing offered by some benign forms of work. Moreover, they can be at risk of entering child labour if adequate policies are not in place.

- To what extent is the involvement of out-of-school children in child labour correlated with various child, household and community background factors? *Background factors can not only affect children's risk of being denied education but also the extent to which denied education is associated with child labour.*

- Are female OOSC more or less likely to be in child labour than male OOSC? Are rural OOSC more or less likely to be in child labour than urban OOSC? Are younger OOSC more or less likely to be in child labour than older child labourers? Are OOSC with educated mothers more or less likely to be in child labour than OOSC with uneducated mothers? Are OOSC from wealthier households more or less likely be in child labour than OOSC from poor households? Are OOSC from ethnic or religious minorities more or less likely to be in child labour than other OOSC?

- What work activities do out-of-school children perform?

This component of the statistical profile provides more in-depth indicators of the interplay between OOSC and the type of work children are involved in. While it stands to reason that most out-of-school children are involved in some form of productive activity (if not child labour per se), effective policy responses require more detailed information on the nature and extent of the work that OOSC perform instead of attending school. Table K4 and K5 provide information on the status and sector of employment of those OOSC at work.

Table CL.4 reports the total incidence of work in economic activity among OOSC and the conditions under which out-of-school children work. The table reports the nature of employment for those OOSC in employment, and in particular, the distribution of out-of-school working children by status in employment (i.e., paid work, unpaid/family work and self-employment) according to a set of background characteristics.

The following are some guidance questions of potential use in drawing conclusions from the results reported in Table K4

- What proportion of OOSC work in economic activity? Is the involvement of OOSC in economic activity correlated with various child, household and community background factors?

- What is the status in employment of out-of-school working children? Are they more likely to be involved in paid work or unpaid family work? What are the child, household and community characteristics that make it more or less likely that an out-of-school child will work in a particular employment status category? A result common to most countries is that the majority of children

TABLE K4. OUT OF SCHOOL CHILDREN: INVOLVEMENT IN ECONOMIC ACTIVITY BY STATUS IN EMPLOYMENT Percentage of out-of-school children aged 6-14 at work in economic activity, by status in employment

	Paid work	Unpaid/family work (farm or business)	In both paid and unpaid family work	Children aged 6-14 in economic activity[1]
TOTAL				
SEX				
Male				
Female				
REGION				
Region 1				
Region 2				
Region 3				
AGE				
6-11 years				
12-14 years				
AREA				
Urban				
Rural				
HOUSEHOLD HEAD EDUCATION				
None				
Primary				
Secondary and higher				
WEALTH INDEX QUINTILE				
Poorest				
Second				
Middle				
Fourth				
Richest				

work with the family as unpaid family workers. However, the distribution of working children by status in employment may vary from country to country and by disaggregated characteristics. For example, the incidence of children working as paid employees could be higher in urban areas (where non-agricultural types of work are concentrated) compared to rural areas, and could be higher for older children (aged 12-14) than younger children (aged 5-11).

Table K5 shows the distribution of out-of-school children at work across sectors of employment (i.e., agriculture, manufacturing, commerce and services), disaggregated by a set of background characteristics.

The following are some guidance questions of potential use in drawing conclusions from the results reported in Table K5:

- In what sectors of employment are OOSC working? What are the child, household and community characteristics that make it more or less likely that an out-of-school child works in a particular sector? Does the sectoral composition of female OOSC's work differ from that of male OOSC? Does the sectoral composition of OOSC's work differ across regions and places of residence? Does the work of older OOSCs differ from that of younger ones? Does the sectoral composition of OOSC's work differ for ethnic or religious minorities? Does the work of older OOSCs differ from that of younger ones?

- Does child labour interfere with education?

  Empirical evidence suggests that work interferes both with children's ability to attend school and to perform effectively once there, underscoring the importance of child labour as a barrier to achieving Education for All. *Table K6* reports the school attendance of child labourers and children not in child labour to illustrate this point.

The following are some guidance questions of potential use in drawing conclusions from the results reported in Table K6:

What is the school attendance rate of child labourers? *A high rate of school attendance among child labourers means most are able to attend school despite the demands of work; it is not, however, an indication that schooling and work are compatible, as work can affect the time and energy that children have for their studies, and their ability, therefore, to benefit from their classroom time. Work can also be associated with more frequent absenteeism or tardiness, factors not captured by the attendance indicator.*

Box 1. International Standard Industrial Classification (ISIC rev 3.1)

The following example shows the codes to build the proposed classification by sector of employment according to the International Standard Industrial Classification of all economic activities ISIC rev 3.1.

Note that the correspondent codes of each sector of employment may change according to the type of classification adopted by the country.

Agriculture		
A	01-02	Agriculture, hunting and forestry
B	5	Fishing
Manufacturing		
D	15-37	Manufacturing
Commerce		
G	50-52	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal, household goods
Services		
H	55	Hotels and restaurants
I	60-64	Transport, storage and communications
J	65-67	Financial intermediation
K	70-74	Real estate, renting and business activities
L	75	Public administration and defence; compulsory social security
M	80	Education
N	85	Health and social work
O	90-93	Other community, social and personal service activities
P	95-97	Activities of private households as employers and undifferentiated production activities of private households
Other		
Q	99	Extraterritorial organizations and bodies
C	10-14	Mining and quarrying
E	40-41	Electricity, gas and water supply
F	45	Construction

TABLE K5. OUT-OF-SCHOOL CHILDREN IN ECONOMIC ACTIVITY BY SECTOR OF EMPLOYMENT

Percentage of out-of-school children aged 6-14 years in economic activity, by sector of employment

	Sector of Employment				
	Agriculture	Manufacturing	Commerce	Service	Other
TOTAL					
SEX					
Male					
Female					
REGION					
Region 1					
Region 2					
Region 3					
AGE					
6-11 years					
12-14 years					
AREA					
Urban					
Rural					
HOUSEHOLD HEAD EDUCATION					
None					
Primary					
Secondary and higher					
WEALTH INDEX QUINTILE					
Poorest					
Second					
Middle					
Fourth					
Richest					

TABLE K6: CHILD LABOUR AND SCHOOL ATTENDANCE

Percentage of children aged 6-14 years attending school, by child labour status

	Children attending school	Children in child labour who are attending school[1]	Children not in child labour who are attending school[2]
TOTAL			
SEX			
Male			
Female			
REGION			
Region 1			
Region 2			
Region 3			
AGE			
6-11 years			
12-14 years			
AREA			
Urban			
Rural			
HOUSEHOLD HEAD EDUCATION			
None			
Primary			
Secondary and higher			
WEALTH INDEX QUINTILE			
Poorest			
Second			
Middle			
Fourth			
Richest			

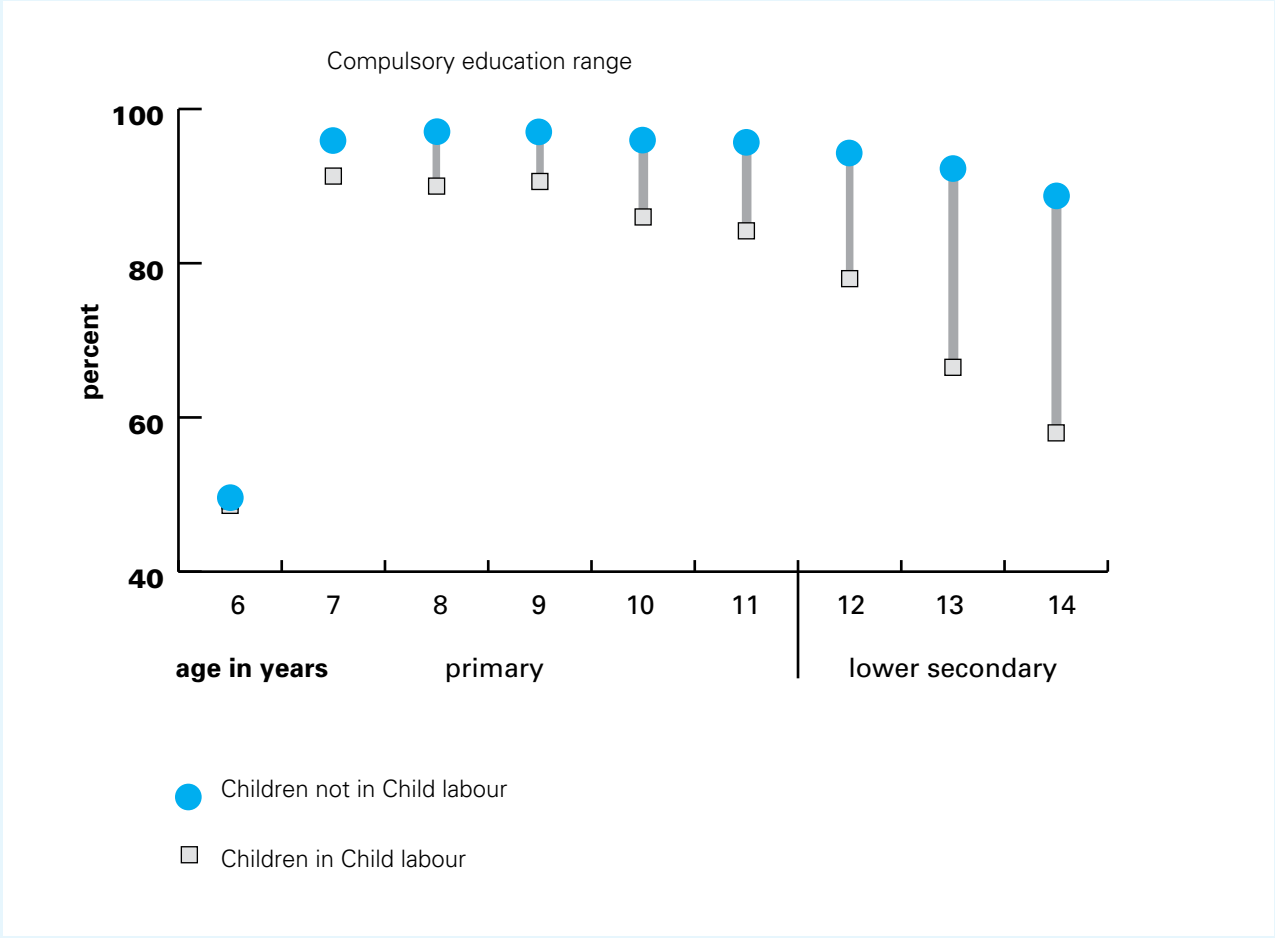
1. The numerator to estimate the percentage of children in child labour who are attending school includes children aged 6-15 attending school who, during the week preceding the survey, were involved in child labour (see the guidance note for definitions of children in child labour). The denominator is the total number of children in child labour.
2. The numerator to estimate the percentage of children NOT in child labour who are attending school includes children aged 6-15 attending school who, during the week preceding the survey, were NOT involved in child labour (see the guidance note for definitions of children in child labour). The denominator is the total number of children NOT in child labour.

What are the child, household and community characteristics correlated with higher (lower) levels of school attendance among child labourers? *The role of factors such as the child's age, sex, ethnicity, residence, mother's education, and household wealth were discussed previously in the context of the questions on the proportion of children in child labour and the proportion of children out of school.*

How does the school attendance rate of child labourers compare with that of children not in child labour? *Comparing the attendance rate of child labourers with that of children not in child labour provides an indication of the extent to which child labourers are disadvantaged in terms of their ability to go to school. Such comparisons usually show that working children lag behind that of their non-working counterparts at every age, underscoring the importance of child labour as a barrier to Education for All. Again, however, school attendance is an incomplete indicator of the education cost of child labour, as work also affects the learning achievement of child labourers that do manage to attend school.*

The school attendance of children in child labour usually lags behind that of their non-working counterparts (see Figure K1 *for an example).*

FIGURE K1. PERCENTAGE OF CHILDREN ATTENDING SCHOOL, BY CHILD LABOUR STATUS AND AGE



School attendance is also negatively correlated with the time children spend actually working.

Table K7 reports the percentage of children combining work and school by weekly working hours categories. UCW research indicates that working hours affect both children's school attendance and school performance (see www.ucw-project.org).

The following are some guidance questions of potential use in drawing conclusions from the results reported in Table K7.

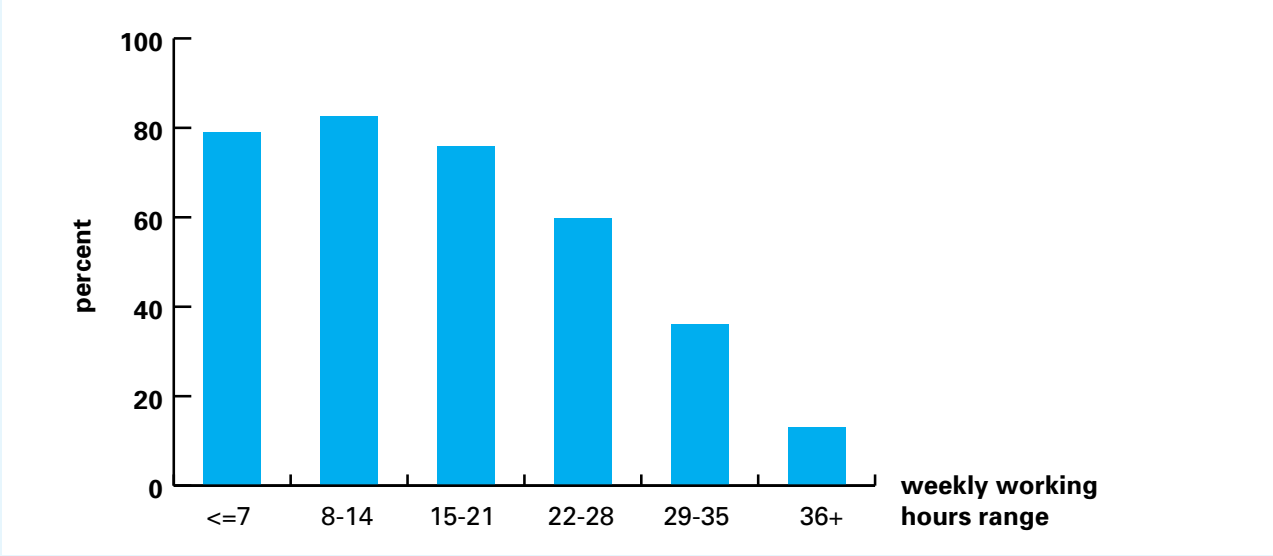
Do male children work more or less than female children? Do children residing in rural areas work more hours compared with their peers living in urban areas?

As illustrated in Figure K2, the likelihood of a working child attending school falls off sharply as the number of weekly working hours increases.

TABLE K7. PERCENTAGE OF CHILDREN COMBINING EMPLOYMENT AND SCHOOL, BY WEEKLY WORKING HOURS RANGE

	WEEKLY HOURS RANGE					
	<=7	8-14	15-21	22-28	29-35	36 +
Total						
Sex						
Male						
Female						
Area						
Urban						
Rural						

FIGURE K2. PERCENTAGE OF CHILDREN COMBINING EMPLOYMENT AND SCHOOL, BY WEEKLY WORKING HOURS RANGE



School life expectancy (SLE) provides a measure of the total number of years of education that a child can expect to achieve in the future. Relatively higher school life expectancy indicates greater probability of spending more years in education, but the expected number of years does not necessarily coincide with the expected number of grades of education completed, because of grade repetition. The school life expectancy of working children is lower at every age.

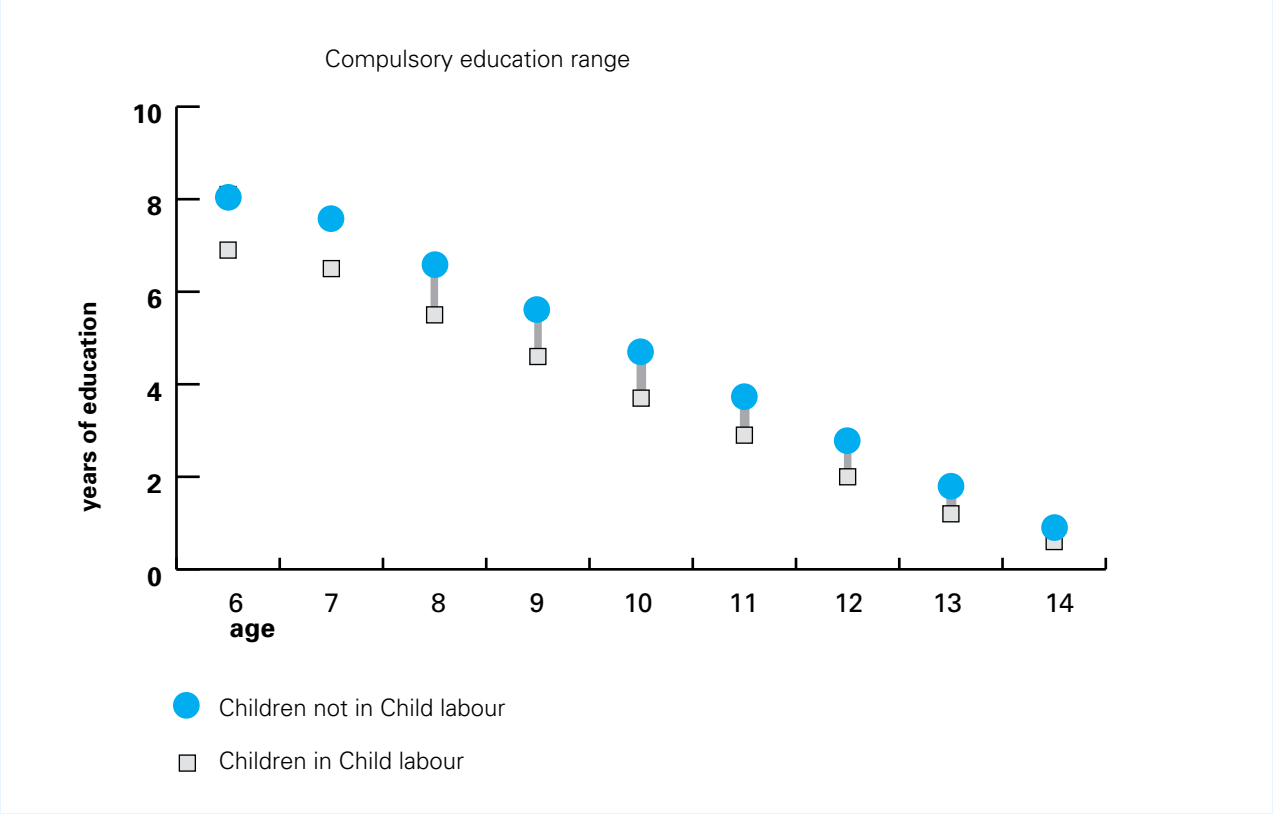
An example reported in the graph in *Figure K3* below indicates that child labourers entering schooling can expect to remain there for less time than non-child labourers. At each age up to the age of 11 years, and taking as upper age limit the age of 14, the difference in school life expectancy is around 1 year. Differences in school life expectancy diminish after this age, but nonetheless continue to favour children not in child labour. This illustrates the different paths taken by child labourers attending school compared to their non-child labourer peers. The former are more likely to drop out prematurely and transition into full-time work at an early age.

What are the household characteristics of child labourers and out-of-school children?

This component of the statistical profile looks at household characteristics of potential relevance to household decisions to keep children out of school and involve them in work. The component looks in particular at indicators of household social vulnerability, as vulnerable households can be forced to keep their children out of school and involve them in child labour as a buffer against social risk. Specific indicators in this context include the share of OOSC and child labourers living in poor households (proxied by the wealth index or the household expenditure quintile), and education of the parents (mother's education or household head's education).

The relevant results reported in the previous tables should be used to develop this part of the study. This section will also serve to summarize the main findings concerning the interplay between child labour and out-of-school children emerging from the descriptive tables.

FIGURE K3. SCHOOL LIFE EXPECTANCY, BY CHILD LABOUR STATUS AND AGE



Annex L.
Tracking Disability and Out-of-School Children

The Convention on the Rights of the Child, in article 28, recognizes the right of all children to receive an education, which is the basis of equal opportunity in life. History shows, however, that children with disabilities tend to be excluded from the education system. This issue is explicitly addressed in article 24 of the Convention on the Rights of Persons with Disabilities, which calls for children with disabilities to have access to "an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live." This includes providing "reasonable accommodations" to a child's needs within the general education system, and effective, individualized support that is aligned with the goal of full inclusion.

The social model of disability maintains that disability results from the interaction of a person's impairments and the environment. In this model, a child may have an impairment, but disability arises from barriers in the environment that prevent the child from participating in society, for example, from attending and succeeding in school. Therefore, when collecting data on disability, it is important gather data on barriers to education, as well as children's impairments or difficulties doing various activities.

The following subsections outline key elements for incorporating disability into the OOSCI study and analysis.

BARRIERS TO SCHOOL PARTICIPATION

As for all OOSCI reporting, data and analysis on disability should include the barriers that keep children with disabilities out of school, regarding both demand and supply (see Chapter 5 on barriers and policies analysis).

DEMAND-SIDE BARRIERS INCLUDE:

- Sociocultural – social norms that block participation; attitudes that lead to low expectations of children's capacity to take part in activities and contribute to society; shame and intense stigma or discomfort associated with disability; actions that are seen as kindness but serve to separate people with disabilities from society; lack of awareness among teachers and school administrators, children, youth and parents, and society in general
- Economic – general costs of education, such as fees, uniforms and textbooks; additional costs, primarily for transportation and including both monetary and the time of family members who are required to offer assistance; low expected economic return to education, based on the reality of barriers to employment and underestimation of what people with disabilities can achieve.

SUPPLY-SIDE BARRIERS INCLUDE:

- Inaccessible facilities – lack of ramps for wheelchairs and doorways that are wide and can be opened easily or automatically; inaccessible toilets in school; poorly maintained sidewalks or unregulated traffic crossings
- Inaccessible materials – lack of appropriate media for information such as software for vision enhancement when using computers, books in Braille or audiobooks; lack of sign language interpretation for children with hearing impairments
- Lack of teacher capacity – related to pre- and in-service training for teachers on inclusive education, including attitudes towards children with disabilities as well as teaching techniques and classroom management; access to specialists to offer teachers ongoing

support, either within the school or through resource centres; children's access to specialists in speech therapy, physical therapy and occupational therapy as well as teaching assistants

- Lack of assistive devices – for example modified furniture, devices for helping with gripping and manipulating small objects, canes, walkers, wheelchairs, prosthetics, Braille and audiobooks, computer screen readers, low-vision magnifiers and hearing aids.
- Lack of flexible curricula – related to curricula that are not adapted to individual children's learning needs, challenges and strengths, and need to be modified in terms of content, presentation, and how students' success is measured

POLITICAL, GOVERNANCE, CAPACITY AND FINANCIAL BOTTLENECKS INCLUDE:

- Lack of national policies and legislation on the right to education for children with disabilities.
  - Lack of a national strategy on inclusive education that includes quantifiable goals, for example, action plans that lay out timetables and responsible parties, and an adequate budget; structures to oversee and inform implementation, such as coordinating committees or councils; civil society engagement, including the involvement of organizations for people with a disability.
  - Lack of administrative capacity, including training on inclusive education for administrators at the school, district and national level, and provision of resources and personnel to implement the necessary changes to implement an inclusive education strategy.

REPORTING ON CHILDHOOD DISABILITY

Collecting data on out-of-school children and on children with disabilities both pose challenges. Combining the two concepts creates even further complications. Children with disabilities may be among the 'Invisible OOSC', defined in the OOSCI visibility model as children at higher risk of not having legal documents and not being registered in any database (see Section 2.2). Due to social stigma, children with disabilities are sometimes hidden at home, and families may not admit to the presence of a disabled child in a household survey or census. Reliance on community workers who may know about disabled family members is one strategy for gathering this data. Birth registries or registries of people receiving disability benefits can also alert enumerators to the presence of disabled family members.

In addition, many children with disabilities live in institutions. This may result from stigma or shame, but can also result from parents feeling they do not have the capacity to care for their children, or simply because of social norms that suggest children with disabilities 'belong' in such places. Moreover, some children with disabilities may be living in juvenile detention centres because of committing crimes or undertaking other antisocial behaviour.

Standard sampling designs for household surveys do not include the institutionalized population and, thus, many children with disabilities could be missed with ordinary data gathering tools. However, information on disability can be found in a variety of sources, including:

- National population censuses – often contain questions on disability that can be useful for making general prevalence estimates and noting regional differences in prevalence
- Household surveys – Multiple Indicator Cluster Surveys (MICS), which have included optional questions on disability in a number of countries; and, possibly, Demographic and Health Surveys (DHS), Household Income and Expenditure Surveys, and Living Standard Measurement Surveys, though they are less likely have data on childhood disability
- National disability surveys – conducted in a number of countries, and potentially a rich source of data; recent examples of government-sponsored surveys include national disability studies in Indonesia, South Africa and the United Republic of Tanzania
- Administrative data – sometimes collect information on disability; countries that have disability benefits or other programmes targeted to reach children with disabilities will have administrative data for those programmes

- Literature review – literature based on both qualitative and quantitative data has been published on a wide range of countries; though the samples used are not always nationally representative, these studies can provide insights into the nature and extent of various barriers faced by children with disabilities
- Disabled people's organizations – generally have publications and other materials outlining the major issues that they see within the country; contacting these organizations can provide information about the attitudes of people with disabilities and their insights into key barriers in a particular country context.

If data on childhood disability exists, then all indicators used for assessing the well-being of children should be disaggregated by disability status. However, children can have many types of disabilities, and the barriers that they face might be quite different. Therefore, it is preferred that data can also be disaggregated by type and degree of disability, as well as by sex and place of residence.

If there are no data on children with disabilities, several approaches could be used to collect information, including:

- Qualitative studies that explore the major barriers to school participation, which can consist of focus groups and structured interviews
- School accessibility audits, which can be useful to assess both the physical accessibility of schools and their modes of communication are also accessible
- Lot Quality Assurance Sampling to estimate disability prevalence and uncover the most important barriers at the national level.

For the long term, efforts should be made to identify appropriate data tools (surveys and administrative) that could potentially fill data gaps, and develop plans on how to modify them to capture important data.

CONSTRUCTING DISABILITY INDICATORS

When integrating disability into the Five Dimensions of Exclusion described in Section 2.4., there are important considerations for addressing the needs and situations of children with disabilities. For the overall indicators pertaining to enrolment, attendance rates and dropout, as well as gender parity and under- or overage school participation, it is important to disaggregate these indicators by disability. In addition, because there are significant differences in the types of barriers that children with different types of disability face, it is advisable to further disaggregate these indicators by type of disability: physical, intellectual, vision, hearing, and behavioural/psychosocial.

Considerations for each dimension, including additional indicators for disability, are outlined below.

DIMENSION 1. The first indicator is the percentage of children of pre-primary age in pre-primary or primary education, by sex or other characteristics. This is simply the number of children of pre-primary school age children enrolled in pre-primary or primary education divided by the total number of children of pre-primary school age. In addition to generating this indicator for children with disabilities, it is important to include an additional indicator:

Number of children with disabilities of pre-primary school age participating in early childhood care and education (ECCE) programmes, including those specifically for children with disabilities, divided by the number of children with disabilities of pre-primary school age.

This can be further broken down into rates for children with disabilities who are also in pre-primary education programmes and those who are not. As early intervention is of particular importance for supporting the learning capabilities of children with mental disabilities, this indicator should also be disaggregated by type of disability. For information on which types of preschool programmes are applicable to the 5DE model, see Section 2.4.1.

DIMENSIONS 2 AND 3. The indicators for these dimensions are the net enrolment rate; adjusted net enrolment rate (ANER), taking into account that some children are attending age-inappropriate grades; and the net and adjusted net attendance rates. The OOSCI framework then goes on to define the gender parity index (GPI), which is simply the ratio of the ANER for girls as compared to boys.

A similar disability parity index should also be calculated. This would be the ratio of the enrolment rate for children with disabilities to the enrolment rate of children without disabilities. A value of one would thus mean that children with disabilities do not face barriers to school enrolment greater than their peers without a disability. To isolate the importance of particular barriers facing children with different issues, it would be advisable to generate this indicator for different types of disabilities.

The issue of formal versus informal education also arises for Dimensions 2 and 3. In some countries, children with disabilities are sent to separate schools, which may or may not be considered part of the formal education system; in other cases, some children are provided education in their homes if they are deemed to be incapable of attending school.

DIMENSIONS 4 AND 5. Disability is definitely a risk factor exclusion and dropout, which can be expected to affect a significant proportion of children with disabilities. Disaggregation by disability is especially important in relationship to Dimensions 4 and 5 because the lack of accessible schools, inclusive curricula, and teachers trained in inclusive education could all pose significant barriers to attending and staying in school.

In the OOSCI context, the survival rate of children in school is defined as the number of children entering the first year of primary (or secondary) education and reached the last grade of primary (or secondary) education divided by the number of children who entered the first year of the corresponding level of education. Thus, survival rates are simply 100 minus the drop-out rate. The OOSCI framework also includes a set of indicators to gauge the extent of underage or overage enrolment or attendance, and grade repetition. All of these indicators should be disaggregated by disability, and where data allows by the type of disability.

ADDITIONAL INDICATORS. In some countries, many children with disabilities attend separate schools or self-contained classrooms within mainstream schools. Sometimes, these children are not considered to be in a particular grade, but only in a 'special' class. Therefore, the above indicators must also be disaggregated by type of class attended to track the rate of inclusion in mainstream schools and classrooms. For example, for enrolment rates the indicators would be:

- Net enrolment rate of children with disabilities in mainstream classrooms in mainstream schools
- Net enrolment rate of children with disabilities in separate classrooms or in separate schools
- ANER of children with disabilities in mainstream classrooms in mainstream schools.

Since children in non-mainstream settings are often in mixed-grade classrooms, or schools that do not use standard grades, it might not be feasible to generate ANERs for those children. However, not disaggregating by learning situation and type of disability could hide important trends relating to particular barriers preventing children from attending school.

In some countries, a significant number of children with disabilities are living in institutions that may be explicitly classified as institutions for children with disabilities or, for example, referred to as 'orphanages'. Many children with disabilities may also be living in juvenile detention centres. Administrative records should be kept on the number of children not attending school who are living in these circumstances. Studies of these populations can then be used to make estimates of how many of these children have disabilities.

As part of implementing the OOSCI framework, efforts should be made to improve data systems on disability. This can be done in a variety of ways:

- Undertake a situational analysis of the barriers to education using both qualitative and quantitative techniques.
- Review existing sources of survey and administrative data in order to identify gaps in information on children with disabilities and the environment
- Develop proposals for filling the data gaps necessary to address the barriers and bottlenecks found in the analysis and for improving the quality of data on children with disabilities.

A country cannot facilitate policy development and evaluation in regard to the goals of the Convention on the Rights of Persons with Disabilities unless it has relevant, high-quality data. This includes data on the experiences of children with disabilities and on the education system's structure and resources of the education system. Therefore, the EMIS typically used for monitoring the education system in general must be adapted to meet this objective. Suggestions for making more inclusive are contained in UNICEF's guide for including disability in EMIS.

In addition, UNICEF and the Washington Group on Disability Statistics, under the auspices of the United Nations Statistical Commission, have developed a survey module on child functioning and disability that can be used to produce internationally comparable data. A second module, to measure the barriers and facilitators to education by children with/without disabilities, is expected to be ready for data collection and use by countries in early 2015. Together, the modules will provide a comprehensive measurement of disability.

Annex M.
Social protection

Social protection represents an "umbrella" for the synchronization of cross-sector interventions, in education, health and nutrition, child protection, and HIV/AIDS, by reaching out to those who are economically and socially disadvantaged. Well-developed, comprehensive social protection systems do not exist in many of the countries where the problem of out-of-school children is most acute. Therefore, the relevance of social protection and extent to which it should be included in the country studies depends on the national context.

Social protection programmes have demonstrated a variety of impacts specifically related to OOSC: higher school enrolment rates, less school dropouts and child labour by removing demand-side barriers to education, reduced need for families to rely on harmful coping strategies, reduction of vulnerabilities, and impact on barriers to gender equality and empowerment of women. Social protection policies can also support inclusive education by introducing changes to address the specific needs of children who are marginalized or excluded (such as children with disabilities and learning difficulties or girls who may not go to school if families consider it unsafe for them) to ensure they can access and benefit from education. Most importantly, by reaching out to those who are economically and socially disadvantaged, social protection policies contribute to increasing equity outcomes.

TYPOLOGY OF SOCIAL PROTECTION PROGRAMMES

In order to proceed coherently with regards to the mapping and analysis of social protection programmes, below is a definition and typology that can be used.

UNICEF's working definition of social protection: Social protection is the set of public and private policies and programmes aimed at reducing the economic and social vulnerability of children, women and families, in order to ensure their access to a decent standard of living and essential services. At the core of social protection measures, UNICEF focuses on four components:

- Social Transfers;
- Programmes to ensure economic and social access to services;
- Social support and care services; and
- Legislation and policies to ensure equity and non-discrimination in children's and families' access to services and employment/livelihoods.

It is important however to remember that social protection has many definitions used by different actors. There is common ground in these definitions and it simply important when working to others to be clear where there is common understanding and where there may be differences.

While acknowledging that the appropriate measures need to be identified and owned within each national context, UNICEF focuses on four core social protection components:

Social Transfers: Social transfers encompass both cash and in-kind transfers. While UNICEF has and will continue to play a strong role in supporting and building the evidence on predictable, state-provided cash transfers, other types of transfers can be appropriate and require assessment (political and social as well as technical) in any given context. Social transfers also include more short-term safety net programmes which can play an important in responding to aggregate shocks – for example economic, natural (drought, floods, etc), conflict and displacement.

Programmes to ensure economic and social access to services: For children and adults, access to services is crucial – yet even where quality supply exists, a number of economic and social barriers stand in the way. Programmes which

address barriers to accessing services – particularly financial and social – reduce children's and adults' vulnerability to factors such as heightened nutritional vulnerability of young children, and the economic or social vulnerabilities which compound this. Core to this are various types of economic support (again, cash or in-kind), including removal of user fees, subsidies and vouchers; and programmes which support overcoming social barriers to access at the community or household/individual level for those who are vulnerable and/or marginalized. While obviously coordination with services is crucial, social protection itself would not include the core supply side of education and health services – which are part of broader social policy but covered by other sectors.

Social support and care services: Recognizing that social sources of vulnerability may require specific types of social support, this component captures a range of human resource intensive support that helps to identify and respond to vulnerability and deprivation particularly at the child and household level. These services help to reduce social vulnerability and exclusion, to strengthen resilience and capacity to cope and overcome shocks and strains, and to link children, women and families to existing programmes and services. Examples include family based care, family support services, home based care. This component is often overlooked by others, and is an important part of UNICEF's contribution to the policy debate.

Legislation and policies to ensure equity and non-discrimination in children's and families' access to services and employment/livelihoods: Considering social protection from a child rights perspective requires removing legal and policy barriers and proactively ensuring equity through protection against exclusion and discrimination. This is part of the "transformative" dimension of social protection and the need to more fundamentally transform societies in order to reduce vulnerability. This component is not meant to be so broad as to encompass all anti-discrimination policy, but to focus on the link to accessing to services and income security. Examples include equal pay legislation, inheritance rights, childcare policy, or maternity and paternity leave.

TYPOLOGY OF SOCIAL PROTECTION PROGRAMMES

Types of instruments	Specific instruments
Social transfers - long-term predictable transfers and safety net/ humanitarian response	• Cash transfers (including pensions, child benefits, poverty-targeted, seasonal) • Food transfers • Food and fuel subsidies • Nutritional supplementation • Public works
Programmes to ensure economic and social access to services	• User fee abolition • Social health insurance • Exemptions, vouchers, subsidies • Provision of ARVs
Social support and care services	• Family support services • Home-based care
Legislation and policies to ensure equity and non- discrimination in children's and families' access to services and employment/livelihoods	• Birth registration • Minimum and equal pay legislation • Employment guarantee schemes • Childcare policy • Maternity and paternity leave • Removal of discriminatory legislation or policies affecting service provision or employment

Annex N.
Training Workshop for Steering Committee and Technical Teams

Before work gets started on the OOSCI study and analysis, it is critical to hold a workshop to provide training based on the OOSCI Operational Manual.

It is recommended to hold the workshop at the beginning of the study process, once the steering committee and technical team have been formed, and the data inventory has been completed (see the sample timeline provided in Table 3, and the data inventory in Chapter 4, Step 1). The national workshop is typically hosted by UNICEF and UIS. Ideally, the workshop will be 4 days.

Day 1 is intended for members of the steering committee, technical team, and other national stakeholders concerned with out-of-school children, with the following objectives:

- Introduce OOSCI approach, framework and methodologies from the Operational Manual
- Raise awareness and understanding of the importance of the study and its linkages to national education policy and planning
- Validate a timeline for the study and a schedule for periodic update meetings between the steering committee and the technical team as the OOSCI study progresses

Days 2, 3 and 4 are intended for members of the technical team, will feature more in-depth presentations on the technical and administrative aspects of conducting an OOSCI study.

The objectives are:

- Train technical team members to conduct the statistical analysis in Chapter 4 (including all templates and tools), as well as the process to analyse barriers and policies in Chapter 5.
- Review the data sources available from the data inventory, and conduct an initial assessment of quality and suitability for the OOSCI study
- Agree on the roles and responsibilities of the technical team
- Validate the work plan and the next steps to undertake the study

Templates to develop an agenda, as well as other resources for a national workshop, are available on the OOSCI website.

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Notes

The Global **Out-of-School Children** Initiative Operational Manual draws on the work of more than 30 UNICEF country offices and ministries of education. In each of these countries, teams of experts successfully completed national and regional studies on out-of-school children. The operational manual is a step-by-step guide on how to successfully uncover information on out-of-school children and it devises policy recommendations that can provide every child with quality education.