Regional Education System on Students with Disabilities | SIRIED

Methodological proposal

UNESCO

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Educational, Scientific and
Cultural Organization

Index

"Differences in education are the rule,

and not the exception"

1. Introduction

In spite of efforts made during recent decades to make advances towards achieving the Education for All goals in the countries of the region, the inclusion of all children, young people, and adults has yet to be guaranteed, and nor are these recipients certain to receive a quality education that permits their full participation as citizens.

The fundamental mandate of UNESCO is to seek to promote all human rights, especially through education and research, and to promote these rights in its areas of activity, standing by countries in ensuring that their education systems comply with the function of being true agents of social cohesion and integration.

One of the groups that have suffered most from exclusion from education is that of persons with disabilities. At the opening of the World Conference on Special Needs Education: Access and Quality, in Salamanca, Spain, in 1994, UNESCO stressed that although education for all is a fundamental human right, insufficient priority is placed on children, young people, and adults with special educational needs, who are all too frequently marginalized (UNESCO and the Ministry of Education of Spain, 1994).

All countries face the challenge of guaranteeing a quality education for all, transforming education systems and schools so that they can meet the diversity of learning needs of all students. This brings with it the urgent need to pass beyond the current uniformity of education systems, in which the same is offered to everyone, and to advance towards education approaches and policies that recognize and value students' diversity of needs, capacities, and identities, arising from their social and cultural origins and from their individual characteristics.

Country policies and legislation play a fundamental role in making progress towards this new approach, and information takes its place as a key element in the definition and monitoring of these policies and legislation, contributing evidence regarding advances, difficulties, and challenges facing education systems. In general, the region lacks statistical information providing basic data and relevant, up to date indicators regarding the education situation of students with disabilities, which would permit comparative analysis, policy development, and resource allocation.

Internationally comparable information available, following the 1997 International Standard Classification of Education (ISCED), fails to provide details of the enrolment of students with disability for each programme and level, or to quantify material, human, and financial resources set aside for this group, although these statistics do appear in the aggregates for each programme and level. This breakdown is also not included in the data collection led by the UNESCO Institute for Statistics (UIS) in each country.

In view of this situation, the Regional Bureau of Education for Latin America and the Caribbean (OREALC/UNESCO Santiago), with the technical and financial support of the Government

of Spain, has considered necessary to develop a regional project aiming to construct an information system on the educational needs and support of students with disabilities, with three specific goals: to contribute to the monitoring of the goals of Education for All and the Regional Education Project for Latin America and the Caribbean (PRELAC); to provide feedback for policy design, implementation, monitoring, and evaluation; and to contribute to a fair and even-handed distribution of the resources that guarantee the right to education for persons with disability.

The construction of the Regional Education Information System on Students with Disabilities (SIRIED) requires the harmonization of concepts and classifications, and the methodological development necessary to meet the goal of ensuring that information can be used to draw comparisons across the region.

In the field of education, students with disabilities are usually referred to as students with special educational needs, although the term also includes other students who – despite not having disabilities – require temporary or permanent access to a number of special aids and resources in order to gain access to educational activities and to progress through the curriculum.

In this regard, the concept of special educational needs, given its breadth of meaning, should be addressed with an equally broad range of factors that describe the group as a whole – running the risk of amalgamating different needs and situations in a single index, making it ineffective in describing the situation at hand. Meanwhile, the concept of special educational needs is currently being questioned, as it separates a subgroup of students from their peers and diverts attention away from promoting changes in policies and practices that provide a response to the diversity of all students.

From the perspective of attending to diversity, the distinction between students with and without special educational needs is breached, as it is believed that all students are different and require different resources and support in accessing education, participating, and learning. This implies advances towards universal learning designs in which the needs of all students are used as an input, instead of planning based on the idea of a standard student with subsequent adjustments in response to the requirements of those students who do not fit into this homogenized system.

The purpose of SIRIED is based on identifying the resources and support needs, and the barriers faced by students with disabilities, in order to guarantee their right to an inclusive education, while enjoying equality of conditions with respect to other students; as well recognizing that other social groups such as children of indigenous persons, migrants, displaced persons, or children living on the street, also face a number of barriers and requires resources and support that may be different to those required by persons with disability.

> The Convention on the Rights of Persons with Disabilities is the response of the international community to the long history of discrimination, exclusion and dehumanization of persons with disabilities. It is historic and ground-breaking in many ways, being the fastest negotiated human rights treaty ever and the first of the twenty-first century.
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> (Preface of *From Exclusion to Equality: Realizing the Rights of Persons with Disabilities*. United Nations. Geneva 2007).

The document is organized in seven chapters. It begins with this brief introduction that sets out the context of the information system. The second chapter provides the rationale of the system and a description of its scope, demonstrating the importance of relevant and reliable information for tracking and monitoring the fulfilment of the right to a quality education, the role of UNESCO in its readiness to contribute, and the need to build an information system focussed on identifying the barriers and support needs of persons with disability. This section also presents the objectives of the information system and the questions that it aims to answer, and provides an analysis of its general characteristics. Chapter three describes the strategies and phases in the construction and validation of the information system, highlighting collaborative work between the countries and OREALC/UNESCO Santiago. Chapter four addresses the conceptual framework behind the analytical model and the development of indicators. Chapter five contains a description of the analytical model adopted, defining the information dimensions and corresponding categories, which are derived from the concept of quality in education from a rights-based perspective, adopted by OREALC/UNESCO Santiago. Chapter six sets forth the indicators, with the technical specifications to be used in creating and interpreting them. Finally, chapter seven describes the classifications to be used in the construction and presentation of the indicators, as well as the definition of each of the proposed categories.

This document constitutes the first version of the Regional Education Information System on Students with Disabilities, which shall be enhanced and improved through the contributions of the countries involved during the implementation process.

❝The lack of data is a revealing data point❞

2. Background and scope of SIRIED

2.1. Availability of statistics

Intense concern has existed for some decades at an international level regarding guaranteeing the right to a quality education for all people, without any kind of discrimination. Significant landmarks such as the World Conference on Education for All (Jomtien, 1990), the United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1993), the World Conference on Special Needs Education held in Salamanca (1994), and the World Education Forum (Dakar, 2000) should be considered alongside another major event: the adoption of the Convention on the Rights of Persons with Disabilities by the General Assembly of the United Nations on 13 December, 2006 (United Nationes, 2006 a).

Article 24 of the Convention on the Rights of Persons with Disabilities establishes that these persons have the right to inclusive, quality, and free primary education and secondary education on an equal basis with others in the communities in which they live. It is also stated that States Parties shall ensure that persons with disabilities are able to access general education at all levels, vocational training, adult education and life long learning without discrimination and on an equal basis with others. On ratifying the convention, States Parties accept an obligation to introduce measures aiming to promote and guarantee the rights of persons with disabilities, and to fight against discrimination.

The countries of Latin America have made significant advances in the area of legislation, but a major information problem impedes the monitoring of the extent to which persons with disabilities are able to exercise their rights. Making these people visible therefore constitutes a first step towards realizing their right to education. "As with many other socially excluded groups in Latin America and the Caribbean, people with disabilities remain invisible in official statistics. Data on disability are scarce. Uncounted and understudied, the disabled are excluded from normal social development discourse. In a competitive market for scarce development resources, the absence of data makes is more difficult to compete for resources when the size and nature of the population to be served is not fully known". (Massiah, quoted in Pantano, 2009)

In the Report of the Special Rapporteur on the right to education, *The right to education of persons with disabilities* (Muñoz, 2007), attention is given to the severe absence of statistical information on the number of persons with disability in the school system. The report also mentions the lack of availability of information on success or failure in schooling, indicators of dropout, education trajectories through the school system, or institutional movements of persons with disabilities.

The scarcity of information on students with disabilities is exacerbated by a lack of information on the level of attention provided for their needs in terms of material, technological, and human resources, and in terms of support that they require in order to enjoy equal conditions to take advantage of opportunities for education and realizing their right to education. This absence

of information brings problems in policy definition and feedback, as well as in the estimation of resources necessary to ensure their access to education and completion of their studies, their participation in the curriculum and in educational activities, and their learning achievements.

Comparability of these data between countries represents another challenges, due to the different forms of statistical methodologies and measures, different definitions of disability, and different categories used to describe these students, reflecting the tension between the conceptual model and the statistics produced.

Many education systems, lacking reliable information, use the estimation made by the WHO in 1980, implying that persons with disabilities represent at least 10% of the population – a figure that, as pointed out by Liliana Pantano (2009), has been widely accepted although in general there is little knowledge of the origin or methodology behind it. Pantano has questioned this estimation, arguing that factors such as context and level of development introduce differences between countries.

2.2. The mandate of UNESCO

UNESCO has a fundamental duty in overcoming the scarcity of information on persons with disabilities, as it is the UN organization that is mandated to coordinate and promote cooperation activities in favour of Education for All (Dakar 2000). The Education for All Framework for Action espouses a commitment made by countries towards the full provision of a quality education for all, without any kind of discrimination – implying the permanent monitoring of advances made by countries towards the achievement of the goals put forward.

UNESCO, through its human rights strategy (UNESCO, 2003), establishes that all of its activities must contribute to the promotion of research and dissemination of knowledge on human rights, education on rights as an integral part of the right to education, and the creation of standards, tracking, and protection of these fundamental rights in all areas of its remit. UNESCO has a special role to play in the promotion of research, academic analysis, and debate regarding the obstacles and barriers that prejudice the full realisation of all human rights, especially the right to education. The results of these activities will contribute to the creation of policies to realise them: they shall promote the creations of standards, the strengthening of capacities, and the provision of technical assistance to Member States.

Another significant precedent, closely linked to this information system, is the Review and appraisal of the World Programme of Action concerning Disabled Persons (2003), which underscores the actions undertaken by the Statistics Division of the United Nations Secretariat with regard to the creation of indicators relating to disability. Landmark achievements include: the publication of the Manual for the Development of Statistical Information for Disability Programmes and Policies in 1996; and the Expert Group Meeting on the Development of Impairment, Disability and Handicap Statistics held in Voorburg in 1994. This meeting produced a number of directives on the inclusion of disability in censuses, surveys, and registration systems and for the promotion of a minimum set of tabulation items and core tables on impairment, disability, and handicap. The World Programme of Action also recommends that the UN develop systems for the periodic acquisition and dissemination of data and information on disability.

In the report on *The right to education of persons with disabilities* (Muñoz, 2007) mentioned above, governments and UN bodies are called upon to draw up qualitative and quantitative indicators to permit the monitoring of progress with regard to the right to education and to inclusive education:

> *Monitoring the right to education and inclusive education in particular, requires a capacity to measure progress. To date, such capacity is lacking. Establishing clear quantitative and qualitative human rights indicators and the setting of benchmarks for future progress will therefore provide important means for doing so and may some way towards filling the current gap in adequate, available data on disability generally, and disability and education in particular. While a quantitative indicator might provide, for instance, information on the number of children with disabilities enrolled in schools, a qualitative indicator will describe the quality of the syllabus and the extent to which disability is mainstreamed or sidelined within the curriculum. Accordingly, the Special Rapporteur encourages Governments, treaty bodies and United Nations agencies to develop indicators to measure the right to education of persons with disabilities.*

The need for information on persons with disabilities has been highlighted repeatedly by officials in charge of special education and primary education in the region's Ministries of Education. Speaking at diverse meetings organized by the inclusive education team of OREALC/UNESCO Santiago, they have underscored the urgency of gaining access to a set of indicators and statistical data shedding light on the true magnitude of the situation and the quality of education being provided to persons with disabilities.

2.3. Why an information system?

Information systems are being assigned multiple purposes, such as: i) providing a suitable and timely inputs for the definition and execution of public policies; ii) offering a description of the situation of the relevant field; iii) informing decision-making processes; iv) monitoring proposed policies, plans, and goals; and v) contributing to the transparency and accountability of public sector management. In view of this large number of responsibilities, the dedication and resources that countries and international agencies devote to ensuring the functionality of information systems can be readily understood.

Generally, priorities coincide with the establishment of statistical practices and policies governed by principles of professionalism and transparency in the data collection, processing, and dissemination phases, as well as with the selection of a suitable methodological basis that is aligned to international standards. Other equally important aspects are more frequently overlooked, such as: accessibility, ensuring that the data and metadata are available in a clear and comprehensible form; relevance and timeliness of statistics created; and the pertinence of the indicators constructed.

Recent years have seen intense activity both at an international level and within countries, aiming to draw up and disseminate methodological standards that ensure the production of quality statistics. In the field of education, the UNESCO Institute for Statistics (UIS) is the body tasked

with compiling, analysing, and disseminating statistics on the global situation of education, science and technology, culture, and communications. The UIS has defined a framework for education statistics with the aim of ensuring not only the relevance and quality of the information created, but also its international comparability.

Countries possess systems for education statistics integrated into broader information systems, in terms of both themes – socio-demographic statistics – and institutions – national statistics systems – and these systems are often assisted by international bodies such as the United Nations Statistics Division and the UIS itself.

Education databases are updated on an annual basis using the results of school censuses, with constant efforts being made to improve the coverage, quality, and reliability of the data. Nonetheless, a general complaint made by the highest level authorities and by qualified users is the absence of optimal mechanisms to provide timely access to data, in terms of the weakness of dissemination mechanisms, which are generally limited to the annual publication of raw data, with a lack of relevant indicators and analytical information for the monitoring of goals and the evaluation of policies in the sector.

In several countries reports indicate the lack of conceptual frameworks for the analysis and interpretation of information, as well as the need to develop more relevant indicators on a number of topics. Certain indicators do not figure among the information normally produced and published in order to shed light on problems in the education sector. This sometimes arises when a problem has already been solved. For example, the primary net enrolment rate is a good indicator, but if a country has already ensured universal enrolment the indicator loses relevance (Sauvageot, 1999). In other cases, phenomena are made invisible or considered unimportant despite representing problems, as in the case of persons with disabilities.

A time delay or reduced speed of reaction arises in many countries, for instance when changes occur in priorities and policies without concomitant changes in information systems. This situation, which is relatively frequent in education information systems of countries in the region, arises as a result of technical issues such as a lack of strength or rigidity in systems for information acquisition and processing, or organizational factors such as a lack of participation in the dynamics of the institution as a whole on the part of its statistics department, leading to parallel information systems.

There can be no doubt that the development of indicators requires access to information, and that the quality of the information available affects the quality of the indicators developed. Differences between countries, in terms of availability of information and quality of data produced, exist in all areas, and the area of education does not escape this issue.

The need to gather information on persons with disabilities is expressed in article 31 of the Convention on the Rights of Persons with Disabilities: *"States Parties undertake to collect appropriate information, including statistical and research data, to enable them to formulate and implement policies to give effect to the present Convention. [...] The information collected in accordance with this article shall be disaggregated, as appropriate, and used to help assess the implementation of States Parties' obligations under the present Convention and to identify and address the barriers faced by persons with disabilities in exercising their rights"*. This article also establishes that States Parties shall assume responsibility for the dissemination of these statistics and ensure their accessibility to persons with disabilities and to others.

As a response to this situation OREALC/UNESCO Santiago has accepted the challenge of constructing a regionally comparable information system that provides more objective and up-to-date information on the education situation of students with disabilities, permitting monitoring of the level of compliance with their right to inclusive, quality education.

> Information systems are not an end in themselves, but rather a mean to improve the quality of education.
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> The information system consists of an additional tool to contribute to the development of more inclusive education systems, which is a responsibility of the Ministries of Education as a whole, including their information production departments.

2.4. SIRIED target group

The SIRIED target group consists of persons with disabilities because, as mentioned above, such persons are currently largely invisible in education statistics. These students are a subgroup of those with special educational needs, a category that in the region includes other students who have no disability but who have a temporary or permanent need for a number of special aids and resources in order to gain access and to progress through the curriculum, as well as to participate in educational activities.

In this regard, the concept of special educational needs, given its breadth of meaning, should be addressed with an equally broad range of factors that describe the group as a whole – minimising the risk of amalgamating different needs and situations in a single indicator, making it ineffective in describing the situation at hand. Meanwhile, the concept of special educational needs is currently being questioned, as it separates a subgroup of students from their peers and diverts attention away from promoting changes in policies and practices that provide a response to the diversity of all students.

SIRIED adopts the conceptualisation of the Convention on the Rights of Persons with Disabilities (UN, 2006), implying a social and interactive model of disability:

"Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others".

Although the Convention includes no specific definition of disability, the definition given in the International Classification of Functioning, Disability and Health (ICF) (WHO, 2001), also expresses that it is a result of the interaction of factors bearing on the individual and on the context. Within this categorisation, disability is seen as a general term that includes handicaps, limitations on activity, and restrictions in participation. It indicates the negative aspects of the interaction between an individual (with a health condition) and his or her contextual factors (environmental and personal factors).

From the perspective of a social model disability is seen as a complex and multidimensional phenomenon that arises from the interaction between factors inherent in a person (handicap or type of disability) and factors from the physical and social context, which barriers inherently put

the person at a disadvantage. This means that when barriers are lower and support is greater, the person is more able to participate in the various areas of social life, despite still being handicapped.

The term 'barriers' is another key element in the definition of disability, and refers to all of the factors related to an individual's surroundings, the absence or presence of which may limit their functioning and participation, generating disability. Barriers include physically inaccessible environments, negative attitudes to disability, lack of resources, curriculum rigidity, the homogeneity of education practices, lack of support services, and economic obstacles (WHO, 2001).

From this perspective, disability is a human rights issue and it is the responsibility of society as a whole to make the modifications necessary in order to eliminate these barriers and ensure full participation for persons with disabilities in the different areas of social life, including education. This shared responsibility does not obviate States of their role as guarantors of the rights of all of their citizens, especially minority groups or those with less power in society.

In keeping with the social and interactive model of disability, SIRIED includes data relating to individuals and to the educational context.

With regard to subjects, there is a need to quantify the number of persons with disabilities and their needs in terms of resources and support that they require in order to access the education system, participate, and learn. In this sense, SIRIED gathers statistics on the number of people enrolled and the number excluded, and their school attendance modalities and through the education system, as well as identifying and quantifying their needs in terms of resources and support. It also compiles information on inequalities that exist within the disabled population, along lines of age, gender, area of residence, ethnicity, or type of disability.

Regarding to the educational context, the information system gathers data on barriers faced by persons with disabilities and on education systems' capacities to meet their resource and support needs, and to minimize the barriers that limit their full enjoyment of their right to education.

There is a need to quantify the number of persons with disabilities in order to make them visible and to identify whether they are suffering discrimination in education as a result of their disability. Conversely, the identification and quantification of their needs will allow comparisons to be drawn regarding what level of attention they are receiving or, to put it another way, will allow gaps to be identified between their potential requirements and the level to which these requirements are being met.

Information acquisition is oriented towards not only special education but rather to all regular formal education programmes and education programmes for young people and adults, whether or not they receive the support of special education. In this regard, it must be pointed out that students with disabilities are enrolled at many regular education centres, without receiving the specific resources and support that are often provided by Special Education services. This situation can be seen as an unmet need, due to difficulties in obtaining resources or a scarcity of resources; conversely, it can be seen as a satisfied demand if the regular school possesses the capacity to offer the resources and support that the students need in an autonomous manner, without resorting to special education.

2.5. SIRIED Objectives

The main purpose of the information system is to provide access to a set of regionally comparable basic information and indicators on education, permitting:

a) Understanding and monitoring of the educational situation of students with disabilities in the countries of Latin America with regard to compliance with the right to an inclusive, quality education.

b) Identification of the barriers faced by persons with disability as well as the resources and support systems that they need in order to guarantee their full and long term access to education, participation, and learning.

c) Provision of relevant information for the definition, development, and monitoring of policies and the provision of resources and support to guarantee equality of opportunities for persons with disabilities.

d) Contribution to the monitoring of Education for All, providing information on a group of persons historically excluded from education statistics.

SIRIED will help to answer the following questions, which have guided the definition of its dimensions, categories, and indicators:

- What percentage of persons with disabilities who are of school age is enrolled in the school system, and what percentage is excluded from the education system?

- What percentage of students with disabilities access regular education and what percentage attend special schools?

- What is the situation of students with disabilities in terms of their trajectories through the school system? What percentage remains in the education system and complete their studies? What are the rates of repetition of grades and dropout? What percentage return to special education after having attended regular education?

- *Do regulatory frameworks, policies, and curriculums guarantee these persons the right to inclusive, quality education under equal conditions with others?*

- What barriers are faced by students with disabilities in accessing and remaining in education, participating, and learning?

- What specific resources and support are required by students with disabilities in order to enjoy equal conditions in exercising their right to education?

- *Are the necessary human, material, teaching, technological, and financial resources set aside to guarantee an inclusive, quality education for students with disabilities?*

- *Do inequalities exist in the educational situation of students with disabilities along lines of gender, area of residence, or ethnicity?*

The implementation of SIRIED will be undertaken gradually, by the divisions of statistics and special education of the countries of the region with the support of OREALC/UNESCO Santiago, in line with the technical recommendations and standards that ensure the compatibility of the data generated with those produced and disseminated by the UIS and other specialised UN agencies. During this implementation process, suggestions can be gathered and used to improve the information system.

2.6. Considerations regarding SIRIED

SIRIED is based on a number of fundamental principles that orient the definition of all of the elements comprise in the system, and which are set forth in section five of this document. From the perspective of right to education approach, all students, without exception, have the right to a quality education that ensures their participation and learning, as well as the right to be educated alongside their peers in the schools of their community. In other words, the right to education is the right to a quality, inclusive education at the different levels of schooling, as set forth in article 24 of the Convention on the Rights of Persons with Disability.

Based on this premise, SIRIED adopts the following dimensions of education quality as an analytical model, as defined by OREALC/UNESCO Santiago: relevance, pertinence, equity, efficacy, and efficiency, considering certain elements of particular significance from the perspective of persons with disabilities.

For each of these dimensions, a number of categories are established, along with a suite of qualitative and quantitative indicators that are considered relevant in providing comprehensive answers to the questions set forth above.

The qualitative indicators generally aim to help understanding the level to which education legislation, curriculum frameworks, and measures adopted by the countries promote and facilitate the development of inclusive education systems, which ensure the right of all persons, including those with disabilities, to a quality education under equal conditions. Whenever necessary, a variable number of significant statements are specified for each indicator, which contribute to the observation, understanding, and processing of the indicator; these are identified as descriptors.

The qualitative analysis of these indicators is complemented with a quantitative approach, given that in order to undertake tracking over time it is useful to convert qualitative variables into a quantitative scale. Each descriptor is classified along a scale, and, depending on the weighting previously imputed to each factor, a numerical value is assigned to the indicator. The scale consists of five categories, each of which is assigned a score between 0 and 4. The assignation of the minimum value 0 (zero) implies the inexistence of legislative and/or regulatory and/or curriculum frameworks, or policies and programmes/actions, as appropriate, linked to the issue addressed by the indicator. The assignation of the maximum value 4 (four) implies the explicit presence of the issue in legislative or regulatory or curriculum frameworks, or policies and programmes/actions, as appropriate.

The quantitative indicators permit the usage of simple statistical measures such as rates, proportions, or percentages to give an approximation of the capacity of public policies and education systems to respond to the educational needs of students with disabilities. This allows attention to be drawn to the gaps that still remain in the full compliance with the right

to inclusive, quality education, and allows to quantificate the efforts necessary in order to achieve full compliance.

A key factor in ensuring the sustainability of the information system is the availability of statistics for the construction of the proposed quantitative indicators. This basic information, which depends on the scope of the annual data gathering activities undertaken by the Ministries of Education of the countries, and the availability in the region of information on persons with disabilities, leads to the development of indicators that seek to strike a balance between what is considered necessary or desirable for the analysis of the level to which persons with disabilities are being provided with the support they require in order to guarantee their right to quality education, and what is possible or feasible, in view of the variables measured and processed.

Therefore, it is important not to lose sight of the following a recommendation from the report *Review and appraisal of the World Programme of Action concerning Disabled Persons*:

> There is an observed tendency for the information collected on disability to relate to topics where the data are perceived to be the most accurate and not to those where data may be difficult to obtain. Often this perception has reflected a social welfare rather than a social development perspective, since data related to prevention and rehabilitation often are viewed as more reliable than data on equalization of opportunities issues. Collection of such information serves to reinforce a social welfare perspective rather than pinpoint those areas that need to be addressed to bring forth meaningful social change. Thus, care must be taken to ensure that the priorities for collecting data do not become the priorities for social policy. As policies encompassing universal design, empowerment of persons with disabilities as development agents and human rights are adopted, these polices would drive decisions on disability indicators.

SIRIED, being a regional project, recognises from the outset that the UNESCO Institute for Statistics (UIS) is the body responsible for compiling, analysing, and disseminating statistics on the global situation regarding matters of education. The UIS defines a methodological-standards based framework for the production of education statistics, with the aim of ensuring that the pertinence and quality, and there international comparability. Meanwhile, the countries possess education statistics systems that are integrated into broader information systems, in terms of both themes (socio-demographic statistics systems) and institutions (national and international statistics systems). For this reason an initial study has been undertaken, in order to determine what information is gathered at the international level by the UIS, and what information is available for the region and for each of its countries, in order to avoid duplication and to work in harmony with the existing efforts.

The countries also take part in the Regional Information System (SIRI), coordinated by OREALC/UNESCO Santiago, which promotes opportunities for liaison between statistics officials at Ministries of Education in the region, and works in harmony with them to creative broader base of information necessary for the tracking of the goals of Education for All and the Regional Education Project for Latin America and the Caribbean (PRELAC), the regional strategy for the achievement of the objectives of Education for All.

The design of SIRIED is based on the technical and methodological guidelines set forth by the UIS, the classifications of the ISCED 1997 International Standard Classification of Education,

and other classifications, such as those of the World Health Organisation (ICD-10 and ICF)[1], which permit the integration of statistics from other social subsystems, and guarantee regional comparability.

Attention has also been paid to the methodological recommendations for the construction of indicators drawn up by the United Nations for compliance with international human rights instruments (United Nationes, 2006b) as well as recommendations made by the United Nations Statistics Division on the creation of official statistics and the development of indicators, particularly those associated with disability.

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[1] ICD-10 and ICF are two of the "International Classifications" developed by the WHO, which can be applied to different aspects of health. These WHO classifications provide a conceptual framework for the codification of a wide range of information related to health. Within the international classifications, health conditions (diseases, disorders, injuries, etc) are classified using ICD-10 (an abbreviation of International Statistical Classification of Diseases and Related Health Problems, 10th Revision), which provides a conceptual framework based on aetiology. Functioning and disability associated with health conditions are classified with ICF (International Classification of Functioning, Disability and Health). Thus, ICD-10 and ICF are complementary and should be used jointly.

3. Development and implementation strategy

SIRIED is the fruit of collaborative activities undertaken between OREALC/UNESCO Santiago and the 19 countries of the Latin American region, and has been made possible thanks to the financial support of the Government of Spain.

At the start of the project the OREALC/UNESCO Santiago technical team tasked with project execution informed the Education Ministers of the countries with regard to the scope and characteristics of the project, and requested the designation of two focal point personnel for its development; one in the area of special education or basic education, and the other in the area of educational statistics. The intention was to replicate in the countries of Latin America the model of collaboration and shared responsibility between the areas of education statistics and inclusive education of OREALC/UNESCO Santiago. In a number of countries, the focal points nominated for this project were the same persons designated as focal points for SIRI, the regional information system coordinated by OREALC/UNESCO Santiago and members of the RIINEE (Ibero-American Intergovernmental Technical Cooperation Network for the Education of People with Special Educational Needs), made up of special education officials at Ministries of Education, and in which OREALC/UNESCO Santiago also participates.

Although this methodology has implied a slower and more complex process, it has been extremely valuable because it has permitted the integration of knowledge and perspectives from the areas of special education and statistics, ensuring greater rigour and relevance in the definition of the dimensions, categories, and indicators used.

The construction of the information system was undertaken in three phases, with the aim of conducting a process of refinement of the initial proposal in order to make it more significant and relevant to the needs and current situations of the countries of the region:

- **Phase one.** Preliminary design of the information system, establishment of the analytic and methodological conceptual framework, and preliminary definition of the variables to be measured and the indicators to be constructed.

- **Phase two.** Validation of the initial design by consultation with a panel of experts and implementation of a pilot study in five countries. The results of this process permitted the drawing up of a second, more refined proposal for the information system.

- **Phase three.** Local validation (in education institutions) in three countries that were participants in the previous phase, in order to draw up the definitive version of the information system. This phase culminated in the application of the first set of indicators in the 19 countries of Latin America.

3.1. Phase one

The initial activity consisted of the evaluation of the availability of statistics on persons with special educational needs (SEN) in the countries of the region[2], and the exploration of countries' information needs in this area for the formulation, tracking, and evaluation of public policies and education system management. Consultation was sought in the 19 countries of Latin America, through a questionnaire designed to obtain information on the concepts, definitions, and classifications used in countries with regard to the target group, and on legal frameworks in force or pending approval.

The response rate to the questionnaire was 74%. The results obtained from the processing and analysis of data received and additional data submitted by the countries made it clear that a large number of different definitions and classifications were in use in the region, and highlighted the complexity and variety of services oriented towards students with special educational needs. The survey also showed significant differences in the quantity, quality, and completeness of statistical information available, and differences in the development and quality of the education information systems present in the region[3].

The project was instigated as a partnership between all of the countries in the region within the framework of the Fourth Session for Education Cooperation with Ibero-America on Special Education and Inclusion in Education organized by RIINEE and OREALC/UNESCO Santiago in Santa Cruz de la Sierra, Bolivia, in November 2007, for directors of basic education and special education at the Ministries Education. Within the framework of these sessions, the first technical meeting of the project was held in Panama, with the participation of specialists in inclusive education and statistics from OREALC/UNESCO Santiago, an information expert from a Ministry of Education of Spain, and the focal point personnel in the education statistics and special education of the countries involved in the second phase of the project: Argentina, Brazil, Costa Rica, Guatemala and the Dominican Republic.

This meeting served as a forum for debate on the focus and scope of the information system, and highlighted the tensions of the concept of special educational needs and its different level of acceptance in countries. In several countries, students with special educational needs are defined as those who have greater learning difficulties and require adaptation in the curriculum and/or specialized support, methods, and resources. The breadth of meaning attributed to the concept, and the need to make use of another concept, namely learning difficulties, represent a difficulty in responding to especial educational needs. Another aspect that was discussed was that of the linkage between the target population of the information system and to the target population of special education, as well as other divisions within the Ministries Education.

Once agreement had been reached regarding the objectives and scope of the information system, the OREALC/UNESCO Santiago team developed the conceptual framework, which underlies the analytical model, as well as a first suite of dimensions, and their respective categories and indicators. The second technical meeting was held in Santiago de Chile in March 2008, with

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[2] In its early phases the project was oriented towards persons with special educational needs, but as a result of the validation process it was agreed that the system should be focused on persons with disabilities, given the breadth of the concept of SEN

[3] The characteristics and conclusions of the research project were published in the document "Consulta a países de Latinoamérica sobre información asociada a las Necesidades Educativas Especiales. Sistematización de resultados", OREALC/UNESCO Santiago, Santiago (2008). Available at http://unesdoc.unesco.org/images/0016/001633/163352S.pdf

the aim of analysing the first version of the information system. This meeting was attended by the focal point personnel of the five countries involved as well as a statistics specialist from the Ministry of Education of Spain, and special education technical personnel from Chile and the Distrito Federal de México. A number of proposals generated were incorporated into the initial design, giving rise to the first preliminary version of the regional information system. In this first phase a number of proposals were generated which were incorporated into the initial design, thus giving rise to the first version of the regional information system, which in this first phase was named the Regional Information System on Special Educational Needs (SIRNEE, according to its Spanish acronym).

3.2. Phase two

The main objective of the second phase was to validate the preliminary design of the information system, with the aim of refining and fine tuning the proposal. The first validation effort consisted of meeting with a panel of experts in the fields of special education and statistics. This panel examined the coherence between the different components of the system (conceptual framework, analytical model, and methodological framework, indicators) as well as the clarity, consistency, and development of each one of its components. The depth and precision of the analysis and suggestions constituted a fundamental resource in the refinement of the preliminary version.

A second version of the design, taking into account the contributions of the expert panel, was validated at a national level in five countries: Argentina, Brazil, Costa Rica, Guatemala, and the Dominican Republic. The objective of this validation was to analyse and assess the relevance of the proposal, the suitability of the conceptual framework, and the applicability of the analytical model and methodological framework, as well as the clarity of the formulation and feasibility of calculation of the indicators[4]. Harmonisation between the definitions and classifications proposed in the system and those in use in these countries allowed to learn about the availability of the necessary information to create the indicators, and a strategy drawn up for their implementation.

In order to validate the indicators, documents were drawn up with format and content depending on whether they referred to a qualitative or quantitative indicators, which would then submitted for implementation, with the aim of ensuring the coherence and standardisation of process. The countries were also requested to report on the relevance of the indicators, and on the need to eliminate or add additional indicators. In order to facilitate the correct interpretation of these documents, examples were provided with statistical information from of Mexico, from both the Distrito Federal and the country as a whole. Significant contributions must be acknowledged from the personnel and officials of the country's Public Ministry and the Distrito Federal Special Education Department, although not being part of the validation countries.

This national-level validation of process provided very significant resources for the adjustment of the preliminary design, in terms of both its basis and the form it took. The conceptual and methodological frameworks were adjusted, and the definitions, target group, and classifications were refined.

The implementation of the pilot study led to significant findings with regard to the availability of information. Of all of the quantitative indicators proposed in the system, this set of five coun-

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[4]   The UNESCO Institute for Statistics (UIS) does not undertake any data collection directly related to the subject of this project, given the lack of agreed classifications and definitions at the regional and global level.

tries was able to fully construct only 11.1% of them, taking into account all requested criteria and information types; meanwhile the countries were able to construct 39.4% of indicators partially, 46.1% could not be constructed, and 3.3% were considered non-relevant.

The feasibility of calculation in the different data dimensions was also highly variable; in the area of equity it was possible to construct 55% of indicators (16% with all requested information types, and 39% partially); in efficiency it was only possible to construct 7% of indicators; in efficacy 49% were successfully constructed (13% with all required breakdowns, and 36% partially); and 38% of relevance indicators were successfully constructed (4% considering all data dimensions and 34% partially).

With regard to the qualitative indicators, countries declared that they possessed systems capable of providing a complete response to 56.9% of indicators, and a partial response to 32.3%; for 9.2% of the indicators selected no systems exist, and 1.5% were not considered relevant. This analysis of systems in place was complemented with an exploration of applicability mechanisms and with a description of the limitations that inhibit or prevent applicability. This qualitative analysis was complemented with a quantitative approach, based on factors categorised along a numerical scale, assigning a numerical value to the indicator depending on the relative weight given to it. This tracking of categorised levels will allow tracking the progress in advances in legislation and policy related to the different issues considered in the analytical model.

The validation process discovered a high level of variability regarding analysis situations (coinciding with the proposed system, restricted to those enrolled in special schools, restricted to the official sector, or limited to particular levels in the system), and on the scope of variables and classifications associated with these variables.

The results of the national validation and its impact on the design of the system were presented and discussed in the framework of the Fifth Session for Education Cooperation with Ibero-America on Special Education and Inclusion in Education[5]. The OREALC/UNESCO Santiago team made a presentation to the country representatives, sharing the revised preliminary design for the information system, as well as the initial results of the national validation. The five countries involved in the validation also presented the process that had been followed, and described the experience as highly positive and necessary.

Advances made at this session can be thought of as a turning point in the definition of the system, with agreements made to introduce certain changes suggested. With regard to the indicators, specific criteria were set to orient decision-making, taking into account impact in the implementation of the system, for instance disaggregating data by different criteria, such as: area, age, and ethnicity. The impossibility of obtaining data in the short term led to the establishment of certain minimum necessary data collection activities, with further data acquisition being left to the judgment of each country or set aside for compliance in the medium to long term.

The work of the consultants and focal point personnel involved in the national validation was extremely onerous, giving an indication of the effort required in the development of the

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[5] "Fifth Session for Education Cooperation with Ibero-America on Special Education and Inclusion in Education" organized by the Ibero-American Intergovernmental Technical Cooperation Network for the Education of People with Special Educational Needs (RIINEE). Ministry of Education of Spain and OREALC/UNESCO Santiago. Cartagena de Indias, Colombia, 27 and 31 October, 2008.

system. The quality of the products and contributions offered reflects the commitment adopted by each of the countries involved, with special recognition being due not only from OREALC/ UNESCO Santiago but from all of the countries of Latin America, which in the future shall benefit from this information system.

3.3. Phase three

During this phase the third technical meeting of the project was held and an agreement was reached to focus the information system on students with disabilities, for two fundamental reasons: because they are the most excluded and most invisible group in education statistics, due to the breadth of the concept of special educational needs which in all countries includes students with disabilities, and because the concept of special educational needs is currently being called into question.

The fundamental objective of this third phase was to validate the information system at a local level. It was considered key to link the project's viability at a macro level with its feasibility at the micro level of educational institutions. The objective of this validation was to generate information that would contribute to the validation of the different components of the system, and would refine the formulation of the indicators and the design of the data acquisition tools.

Two very different countries were selected: Argentina and Guatemala. Brazil was later added, assuming responsibility for the financing of the pilot project, in view of its high regard for the relevance of this information system. The local validation was undertaken by specialized institutions in each country[6]. Questionnaires were used to obtain qualitative and quantitative information in a sample of establishments engaged in regular education, special education, and education for young people and adults in each country, representing different situations with regard to their geographical location, management model, and educational levels. Interviews were used to investigate other aspects: the availability of statistical information that the system needs, and characteristics of record keeping and reliability; the level of uptake of current regulations and their real world application in the institutional education project and in teaching practices; and to gain an impression of the vision of teachers surveyed with regard to inclusive education, investigating barriers affecting applicability.

In accordance with the results of the local validation, the current version of the information system was refined and drawn up, under the programme name of the Regional Information System on Students with Disabilities (SIRIED), opening the way for and implementation phase which will be conducted jointly by OREALC/UNESCO Santiago and the Ministries of Education of the 19 countries of Latin America.

Taking into account the limited availability of information in a significant number of countries, implementation of the information system shall be conducted gradually. The first action shall be to construct a subset of qualitative indicators relating to the main existing standards, and their applicability, and tracking; as well as those quantitative indicators that can be constructed using basic statistical data. At the same time, joint working activities shall be arranged in order to continue to incorporate the remaining indicators and to undertake an ever more complete

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[6]   Universidad de San Martín in Argentina, Ministry of Education in Brazil, and Asociación de Capacitación y Asistencia Técnica en Educación y Discapacidad (ASCATED) in Guatemala.

disaggregation of the information under study. Progress in this area will require agreements with countries in order to generate the new content that shall be subject to data collection and processing within the framework of the annual statistical studies currently conducted. If necessary, and alongside these activities, the project will incorporate civil society, the academic community, and intergovernmental organizations with interests in the field of education and protection of the rights of persons with disabilities.

4. Conceptual framework

The information system's analytical model is based on a number of interrelated principles, which are described in this section. The starting point is a view of education as a public good and a fundamental human right from which no one should be excluded, and the adoption of a right to education approach that must be based on the principles of compulsory, free education, with equal opportunities and no discrimination, and the right of all persons to a lifelong quality education.

The second principle that guides the analytical model consists of the dimensions of quality education from a rights based perspective: relevance, pertinence, equity, efficacy, and efficiency. These dimensions, adopted by the Ministries of Education of the region of Latin America and the Caribbean in Buenos Aires in 2007, are analysed specifically for students with disabilities taking into account elements that are of particular relevance in guaranteeing their access, completion, participation, and learning.

Inclusive education is the third principle guiding the analytical model, because it is a key component in the right to education and of particular significance in the case of persons with disabilities in guaranteeing their right to quality education under equal conditions with others. Although discourse regarding education is oriented towards inclusive education, policies, regulations, and practices in most countries are still based on the paradigm of integration, or are currently in a phase of transition towards inclusive education – adding complexity to the process of establishing indicators.

Therefore the guiding principle is related to the conceptualisation of the target population of the model from the perspective of attention to diversity, which is one of the fundamental characteristics of inclusive education. This is based on the premise that differences are a part of human nature, and that each student has personal and specific educational needs in gaining access to the experiences of learning and fully participating in school life. The education of students with disabilities comes within the broadest approach to attention to diversity, providing the resources and support that are necessary and eliminating the barriers that limit their capacity to access and remain in the education system, and their full participation and learning, in coherence with a social and interactive approach to disability.

4.1. The right to education

All persons have the right to education. This right, which is recognized in numerous international instruments and in the legislation of countries, has its roots in philosophical, anthropological, psychological, sociological, and pedagogical arguments that are based on the fact that the human condition, unlike that of other species, is an unfinished being that requires education and the influence of others for development throughout the course of an individual's life. The human condition is an individual's task, in which he or she needs the help and guidance of others (Escámez, 1989).

It is through education that the human being becomes *"fully human" (Savater, 2006).* Thus, as a humanizing process, education takes on an intrinsic value and becomes a fundamental human right from which no person may be excluded. The full development of the human personality is thus one of the main purposes assigned to education in the education laws of countries and in international rights instruments such as the Universal Declaration of Human Rights (1948), the International Covenant on Economic, Social, and Cultural Rights (United Nations, 1966), or the Convention on the Rights of the Child (1989).

Education is not only the driving force behind individual human development but also fuels the development of countries and of society as a whole. This aspect is directly linked to a second argument in favour of a rights-based approach to education: the right to education is closely related to the construction of citizenship as it makes possible the exercise of other rights (OREALC/UNESCO Santiago, 2007)

Considering education as a human right and not as a good or as a mere service implies that it can be demanded by persons and that states are under an obligation to respect, guarantee, protect, and promote it. Under international law it is considered that this right must be respected even though specific conditions may determine the ways in which particular state may be able to guarantee it. The Committee on Economic, Social and Cultural Rights (United Nations, 1966) has set forth four parameters for use in evaluating compliance with the right to education on the part of countries:

a) Availability. This means that a sufficient quantity of education programs and institutions must exist throughout the country.

b) Accessibility. Education programmes and institutions must be accessible to all, without any kind of discrimination. There are three kinds of accessibility:

   I) Physical accessibility: schools must be safe, must be located within a reasonable distance, and may not have barriers that limit access and movement within them.

   II) Accessibility of the curriculum: measures, resources, and support permitting learning and participation in educational activities, such as learning in a student's native language, specific requirement, technical support, culturally relevant teaching materials, etc.

   III) Economic accessibility: elimination of direct and indirect costs that must be paid by families and that in many cases represent an obstacle to the exercise the right to education.

c) Acceptability, format and content of education. The curriculum and teaching methods must be relevant, culturally appropriate and of high quality, and coherent to the aims of Article 13 of the International Covenant on Economic, Social, and Cultural Rights; and the State must set minimum standards for all schools.

d) Adaptability: education provision, or curriculum, and teaching must be flexible in responding to the requirements of changes in society and in order to be able to adapt to the needs of persons in different social contexts and cultures.

From a rights-based perspective, the principles contained in the right to education that must be guaranteed by States for all citizens are as follows:

- Compulsory and free education.

- Equality of opportunities and lack of discrimination.

- The right to quality education

4.1.1. Compulsory and free education is fundamental in guaranteeing the right to education, and are therefore recognised in the international law instruments mentioned above. The compulsory nature of education includes the duty of families, which may not deny education to their children, and of the state, which must guarantee that all children may participate in compulsory education, to which end it must ensure that education is free, eliminating financial and other obstacles that may impede participation in education for the years that are compulsory in each country. In this context, public school plays a fundamental role in guaranteeing the right to education (OREALC/ UNESCO Santiago, 2007)

Major advances have been made in Latin America with regard to the extension of compulsory education, extending to what is known as lower secondary education and, in some cases, upper secondary education and part of initial or preschool education. In order to ensure that all students participate in education as is compulsory in each country, it is vital that education be free because rights are not bought or bartered. To this end not only direct costs such as enrolment or tuition fees but also indirect costs must be met by the State (food, school transport, materials, etc.), as well as opportunity costs (the income that the family loses when child attends school instead of working or contributing to the household income) in the case of the most vulnerable families (OREALC/UNESCO Santiago, 2007).

Notwithstanding the excellent progress made in the extension of compulsory education, such advances must, within the framework of Education for All, be *lifelong,* implying that all persons have the right to education at all levels (OREALC/UNESCO Santiago, 2007). In this regard a distinction must be made between the "operative" options of States, which must establish priorities in order to guarantee minimum standards, and their long-term vision towards which achievements made must continue to advance.

4.1.2. Equality and absence of discrimination. In order for the right to education to be guaranteed in a fair way, it must be guaranteed and applied to all persons without any distinction. The Convention against Discrimination in Education (UNESCO, 1960) defines discrimination as any distinction, exclusion, limitation or preference which, being based on race, colour, sex, language, religion, political or other opinion, national or social origin, economic condition or birth, has the purpose or effect of nullifying or impairing equality of treatment in education and in particular:

- Of depriving any person or group of persons of access to education of any type or at any level.

23

- Of limiting any person or group of persons to education of an inferior standard, that is, offering education of unequal quality.

- Subject to the provisions of Article 2 of the Convention[7], of establishing or maintaining separate educational systems or institutions for persons or groups of persons.

- Of inflicting on any person or group of persons conditions which are incompatible with the dignity of man.

The abolition of discrimination in education requires the elimination of practices that limit not only each person's access to education, but also their remaining in education and completing their studies, as well as their full development and learning. Many students have access to school but are excluded from learning, or do not participate fully in the curriculum or other educational activities, or in decision-making affecting their lives.

Realizing full participation and non-discrimination requires the development of inclusive schools that welcome all students of the community, regardless of their social and cultural origin and their personal characteristics or life situations, and which meet their learning needs, offering them the support they need in order to participate and learn. (OREALC/UNESCO Santiago, 2007)

4.1.3. **The right to quality education.** The full exercise of the right to education requires that the education provided be of quality, promoting the full development of each person's potential through socially relevant learning and educational experiences that respond to the needs of people and of the contexts in which they develop and learn (OREALC/UNESCO Santiago, 2007). This implies that the right to education is the right to learn and the right to learn throughout one's life, from birth.

4.2. Education quality from a rights based perspective

Education quality is a constant goal of all education systems but it has different meanings for different persons and institutions. To speak of quality is to make a value judgment that is af-

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[7]   «When permitted in a State, the following situations shall not be deemed to constitute discrimination, within the meaning of Article 1 of this Convention:

(a) The establishment or maintenance of separate educational systems or institutions for pupils of the two sexes, if these systems or institutions offer equivalent access to education, provide a teaching staff with qualifications of the same standard as well as school premises and equipment of the same quality, and afford the opportunity to take the same or equivalent courses of study;

(b) The establishment or maintenance, for religious or linguistic reasons, of separate educational systems or institutions offering an education which is in keeping with the wishes of the pupil's parents or legal guardians, if participation in such systems or attendance at such institutions is optional and if the education provided conforms to such standards as may be laid down or approved by the competent authorities, in particular for education of the same level ;

(c) The establishment or maintenance of private educational institutions, if the object of the institutions is not to secure the exclusion of any group but to provide educational facilities in addition to those provided by the public authorities, if the institutions are conducted in accordance with that object, and if the education provided conforms with such standards as may be laid down or approved by the competent authorities, in particular for education of the same level».

fected by a number of factors such as the meaning that is attributed to the concepts of education, of human development, and of learning, by the predominant values in a particular culture, and the type of society that is hoped to be built and the type of person that is hoped to emerge from the education system. The concept of education quality in use must therefore be made absolutely explicit, as it is a basic principle behind the analytical model adopted in categorising indicators.

From a perspective coherent with a rights based approach, quality education is characterised by the following elements (OREALC/UNESCO Santiago, 2007):

- **Relevance**[8]. This is the what and the why of education, its goals and its contents. Under an approach based on human rights, it is vital to set forth the goals of education, and whether these represent the aspirations of society as a whole rather than a set of ideals espoused by only certain groups within society. In International Instruments, the following goals are ascribed to education: the achievement of the full development of the personality and of human dignity; the promotion of respect the fundamental rights and freedoms; the promotion of participation in a free society; and the promotion of understanding, tolerance, and relationships between all nations, religious or racial groups, and the maintenance of peace.

- **Pertinence**[9]. Education must be purposeful and must be meaningful to the different communities and persons involved, such that they can take ownership of the contents of global and local culture and construct themselves as subjects with their own identity. This requires moving beyond homogenised approaches, in which the same is offered to everyone, towards approaches that consider the diversity of identities, needs, and characteristics of persons and of different social and cultural contexts.

- **Equity.** Education becomes quality education when it achieves the democratisation of access and knowledge; when any person may receive the support that they need in order to enjoy equality of conditions in taking advantage of education opportunities and learning at levels of excellence, such that education does not carry over inequalities in origin of students or apply conditions to their options for the future.

  Equity combines the principles of equality and differentiation. Unequal or special treatment, under certain circumstances, is legitimate and justified in achieving the greater good of equality between human beings. In the case of education this fundamental equality is access to knowledge or, put in another way, the achievement of equal learning outcomes. The achievement of this equality requires treatment that is differentiated, without being discriminatory or exclusive, with regard to financial, material, human, technological, and teaching resources.

- **Efficacy and efficiency.** These are closely related attributes of public action that respond to the requirement for accountability before citizens. Efficacy consists of the analysis of levels of achievement or failure in guaranteeing the achievement of goals related to the principles of equity, relevance, and pertinence of education. Conversely, efficiency implies the analysis of how public action assigns necessary resources to edu-

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[8] This is similar to the criterion of acceptability established by the Committee on Economic, Social, and Cultural Rights (1999): General Comment Nº 13: The right to education (article 13 of the Covenant).

[9] This is related to the criterion of adaptability established by the Committee on Economic, Social, and Cultural Rights (1999): General Comment Nº 13: The right to education (article 13 of the Covenant)..

cation and whether these resources are suitably distributed and used, achieving the maximum results with the minimum resources possible.

4.3. Inclusive education as an element of the right to education

During recent years the concept of inclusion has gained ground in the areas of social and educational actions, as social and educational exclusion is a growing phenomena in both developed and developing countries. The term 'inclusive education' has different meanings in different countries, and can be understood in a broad or in a narrower sense. In some cases it is seen as a new term for special education, while in other cases it is used synonymously with the integration of children and young people with disabilities and other students labelled as having special educational needs into normal schools; while in rarer cases it is used to refer to children who live in context poverty or in situations of vulnerability.

The approaches of inclusion and of integration are different in terms of the aim and focus of attention. The school integration movement arose during the 1960s, hand in hand with the advance of social movements in favour of human rights, advocating against educational segregation of certain social groups, including persons with disabilities. The integration movement is based on the principle of normalisation, formalised by Bank Mikkelsen (1959), which aims for persons with disabilities to lead a life that is as similar as possible to that of other citizens with regard to options and opportunities, in the different spheres of life (education, work, housing, leisure etc). Integration established a fundamental movement in favour of the right of children with disabilities to be educated in the schools of their communities.

Although the integration of children with disabilities or other special educational needs into normal schools was an important step in the exercise of the right to education, experience over several decades has highlighted a number of difficulties that must be considered in this analysis. The following are particularly noteworthy (Blanco, 2000):

- The transfer of the approach of special education to the normal school, reflected in aspects such as individualised attention for the students integrated rather than the transformation of education processes and the organization of the school and classroom, or the provision of additional resources and support only for the "integrated children";

- In many cases, a greater emphasis on the social development of integrated children than on their learning;

- The persistence of the homogenising model applied in most normal schools, the move towards attention for an theroretical "standard pupil";

- Lack of training both for teachers at normal schools, who judged themselves unable to meet the needs of integrated students, and for support teachers, who have not been trained to care for these students based on an educational approach governed by the standard curriculum.

Under the integration approach, students incorporated into normal schools were forced to adapt or "assimilate" to the educational services available (curriculum, values, standards, etc.) regardless of their social and cultural origin, their capacities, their native language, or their living situations. The education system remains inflexible, and actions are therefore centred more

on individualised attention for the needs of students who fail to fit into the available education services (curriculum adaptations, specialized support, etc.) rather than modifying those aspects of the educational and learning context that limit participation and learning for all (Blanco, 2008).

There is no doubt that the integration of students with disabilities has brought about significant changes in many schools, but no changes have arisen in the education system as a whole, which in most countries continues to operate based on a homogenised approach to education that excludes many students from education and learning. Nonetheless, it must be stressed that many countries are taking steps towards giving ever greater consideration to diversity as a central theme of education policy, although much remains to be done before education cultures and practices in schools are transformed.

The integration approach can be identified with the following characteristics:

a) Attention is focused on certain groups of students who have historically been segregated or marginalised and who are incorporated into normal schools.

b) Intervention is based more on individualised attention for students than in the transformation of the learning and education system. Experience has shown that the integration of certain groups lacks efficacy when schools lack preparation for attending to the diversity of the student body.

c) Additional resources and support systems are oriented preferentially to the students labelled as "special needs students" or "integration students".

d) The responsibility for the education of integrated students often falls on support professionals or specialists.

e) Integration has brought a greater transformation of special education than of general education.

The educational inclusion movement constitutes a further step in the exercise of the full right to quality education, as it implies not only that students who have historically been excluded or segregated are educated in normal schools, but also that the schools transformed their education practices, policies, and cultures in order to favour these students' full participation and learning. Inclusion seeks to make further advances in the process that was initiated by the education integration movement, transforming general education and the education system as a whole in order to offer quality education without exclusion, which responds to the diversity of the student body

UNESCO (2009) defines inclusive education as a process oriented towards responding to the diversity of needs of all students, increasing their participation in learning, culture, and communities, and reducing and eliminating their exclusion within and from the education. It brings with it a new vision of education characterised by the following elements (UNESCO, 2005; Ainscow and Booth, 2004):

a. Attention is not focused on certain groups of students. The aim of inclusion is to guarantee of quality education for all, paying special attention to groups or persons who are excluded or at greater risk of being marginalised or of having suboptimal performance; these groups can vary between countries and between schools.

b. Actions are oriented towards transforming the educational practices, organisation, and culture of schools and other learning environments in order to respond to the diversity

of educational needs of the entire student body. Inclusion seeks to identify the barriers that limit access and permanence in the school, participation, and learning, and aims to find the best way to eliminate or minimize these barriers.

c. Resources and support systems are available for all schools and students that require them.

d. Teachers are responsible for the learning of all students, regardless of their social and cultural origin and their individual characteristics.

e. Inclusion implies a transformation of education systems and of general education based on diversity and not on homogeneity: approaches, curriculums, assessment systems, teacher training. Inclusion and attention to diversity must become a guiding principle across the full breadth of general education policies, and the responsibility of the education system as a whole.

Inclusive education falls within the framework of the Education for All (EFA) agenda, a UN initiative based on the 1990 *Jomtien Declaration* and ratified in the year 2000 at the World Education Forum in Dakar. The *Expanded Commentary on the Dakar Framework for Action* places emphasis on the students most vulnerable to exclusion and identifies inclusive education as one of the principal strategies to address this issue. Inclusion is the decisive factor in making advances towards the goals of Education for All, as without it it is highly probable that one or more groups of children would be excluded from education (UNESCO, 2005).

Inclusion is a central element of the Convention on the Rights of Persons with Disabilities. Article 24 of the Convention establishes that the realization of the right to education for persons with disabilities, without discrimination and based on equal opportunity, States Parties shall ensure an inclusive education system at all levels and life long learning. It is also stated that persons with disabilities may access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live.

It must be pointed out that inclusive education also refers to the wellbeing and participation of the education community as a whole, and requires that the needs of educators and of families are taken into account. The achievement of a change in conceptions, attitudes, and practices among teachers and those who train teachers, and the realization of the right of families to participate in the education process and in decision-making regarding their children, are challenges that must be addressed in order to make progress towards inclusive education. Attention to the needs of teachers and of families, who require support in order to offer an education based on inclusivity, are fundamental aspects in guaranteeing the right to quality education for all.

4.4. Attention to diversity; towards seeing difference as an asset

This section describes the development over time of conceptualisations of the information system's target population, which have evolved from a view of differences as anomalies, that which distances a person from the norm, to seeing differences as an asset and as a key part of the human condition; and from a medical approach, based in individuals' limitations, to the educational and curriculum-based approach that emphasises students' potential and the elimination of the barriers that they face in fully participating and learning.

4.4.1. Disability

Changing definitions of disability in international circles have shown a strong tendency to move from a model centred on limitations or deficiencies of the individual to a social model in which disability is conceived as a complex and multidimensional phenomenon that arises from the interaction of individual factors with the social and physical context. The difference and classifications adopted by the World Health Organisation (WHO) illustrates this change. In 1980, when the WHO published the *International Classification of Impairments, Disabilities, and Handicaps*, (ICIDH) it established the following definitions:

- Impairment: In the context of health experience an impairment is any loss or abnormality of psychological, physiological or anatomical structure or function.

- Disability: In the context of health experience a disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being.

- Handicap: In the context of health experience a handicap is a disadvantage for a given individual, resulting from an impairment or a disability, that limits or prevents the fulfilment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual.

In the ICIDH, the term "handicap" was used to refer to the social consequences of illness, but this concept only represented the consequences of the illness itself, and not of interaction with contextual factors (Ibáñez, 2002). With the publication of the International Classification of Functioning, Disability and Health (ICF) in May 2001, the WHO abandoned the term handicap and adopted the term disability as a general term to refer to the three perspectives (bodily, individual, and social), adopting a definition that included the components of "activity limitations" and "participation restrictions" and contextual factors. Activity limitations are difficulties an individual may have in executing activities. Participation restrictions are problems an individual may experience in involvement in life situations. Contextual factors make up the physical, social and attitudinal context in which people live and conduct their lives, which may act as facilitators or as barriers, improving or limiting functioning and participation; they may reduce or generate disability.

The rights-based perspective places particular importance on the definition adopted in the Convention on the Rights of Persons with Disabilities, which states in its first article that disability is an evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others. In this definition, as in the definition discussed above, it is clear that a social model of disability has been adopted, seeing disability as the result of an interaction between a personal condition (the impairment) and the surroundings (due to barriers), often placing people at a disadvantage.

Within an approach to disability centred on the limitations of the individual, intervention aims to attain a higher standard of adaptation of the person and a change in the conduct, instead of promoting changes in the surroundings as an adaptation to people's needs. Conversely, in a social model, less importance is ascribed to the deficiency of the individual than to his or her potential and what he or she may be able to do if contextual barriers are eliminated and necessary support provided. Therefore, intervention is based on social actions and it is a joint responsibility of society to make the necessary environmental modifications in order to ensure the full participa-

tion of persons with disabilities in society. According to this model, disability is seen as a political and human rights issue, and the full participation of persons with disabilities is promoted in the different areas of social life, including education.

While the role of schools in overcoming impairments is limited, they can have a significant impact on the reduction of disabilities by providing support and eliminating physical, personal, and institutional barriers that limit participation and learning for children and young people with disabilities (Ainscow and Booth, 2000).

With the establishment of parallelism between the approaches of integration at inclusion, integration has been seen to be fundamentally oriented towards promoting changes in individuals so that they can adapt to the educational services available, while the focus of action in inclusion is the elimination of contextual barriers and the provision of support services necessary to promote the full participation and learning of all persons. Inclusive education is therefore coherent with the current conception of disability.

In most education systems, the area of special education has been given the task of providing specialized educational attention for persons with more severe learning difficulties or disabilities. At the time of its introduction it was strongly linked with medicine and psychology, giving rise to the so called medical approach, which puts forth an organic conceptualisation of disability and supports the provision of specialized educational services aimed towards the rehabilitation of the individual, fully separated from normal education. However, some decades ago the area of special education began to make advances towards a more teaching-based approach, based on the belief that the aims of education at the same for all persons, including those who have some kind of disability. Under this perspective, special education ceases to be considered as a parallel system, and becomes a support system for normal education allowing students with special educational needs to achieve the aims set forth for the general education of all citizens of a country.

In most countries in the region, special education is defined as a suite of services, human and technical resources, specialized knowledge, and support to meet the temporary or permanent special educational needs of certain students in the education system. In synergy with the rights-based approach adopted, it is believed that special education must be part of the regular education system, supporting and complementing the educational actions conducted in normal schools and by all teachers in order to fully meet students' special educational needs.

4.4.2. Special educational needs

The concept of special educational needs (SEN) has been in use for some decades and is taken into account in policies and regulations of the countries of the region, although definitions vary between countries. The concept is currently a topic of debate in many countries for different reasons, which are discussed below.

The term SEN appeared and was consolidated with the 1978 publication of the Warnock report, the fundamental document in the development of integration in Great Britain and which was later used in the creation of the country's education law. The term brought with it a new concept in special education and a different view of persons who had historically been subjects of this education system – persons with disabilities.

According to the Warnock report (1978), the concept of SEN refers to children, young people, and adults who require one or more of the following special educational services during the process of their development, teaching, and learning:

a) the provision of special means of access to the curriculum through special equipment, facilities or resources, modification of the physical environment or specialist teaching techniques.

b) the provision of a special or modified curriculum.

c) particular attention to the social structure and emotional climate in which education takes place.

This concept is broader than the concept of disability, as a large percentage of students exists apart from those who have disabilities – varying between countries and depending on the characteristics of schools – and who for different reasons may require the assistance and resources mentioned above during their schooling in order to optimise the development and to maximize their learning and participation. The Warnock report states that one out of every five students may present special educational needs during different periods in their schooling, and this proportion may be higher in certain countries of the region.

The breadth of the concept of SEN is also reflected in the definition adopted in the Framework for Action of the Salamanca World Conference: "the term 'special educational needs' refers to all those children and youth whose needs arise from disabilities or learning difficulties" and who are unable to benefit from school education because they are made to work; they live on the street, they live in conditions of extreme poverty or suffer from chronic malnutrition; they are victims of war or of armed conflicts (UNESCO, 1994).

A fundamental advance made in the concept of SEN is that of ceasing to place emphasis on impairment, which is a medical aspect, and starting to pay more attention to the educational needs of students in making progress towards the goals of education and through the school curriculum, establishing different levels of support and resources and requiring education systems to provide them to those who need them at any given time.

The concept of SEN implied moving on from an individual model of learning difficulties to an educational and curricular model based on the following characteristics:

a) SEN are defined not by traditional diagnostic categories but by the help and resources that must be provided to students in order to facilitate their learning progress and to achieve the goals of education.

b) Participation difficulties and learning difficulties experienced by students are interactive in nature; they are not only attributable to the students themselves, but rather arise through the interaction between students' difficulties and potential, and the strengths and limitations of their educational and teaching context.

c) This interactive origin of SEN implies that such needs are relative and vary depending on the characteristics of schools and teachers. The special educational needs of the student may differ from one school to another, depending on the school climate, organisation, and teaching provided. This means that special educational needs can be assessed only through an evaluation of the student in interaction with the context in which he or she learns and develops.

d) SEN, unlike impairment, are not static but rather change depending on progress made by the student and changes in teaching and in the educational environment. In this regard it is useful to use the term "situation" as opposed to the term "state".

31

e) SEN can be temporary or permanent, although in practice it has been shown that the labelling of a student as having SEN often remains even when he or she no longer requires special assistance.

It must also be stated that although the concept of SEN has often been associated with the learning difficulties, in recent years many countries in the region have adopted a broader vision that has led them to extend the use of the term to incorporate the needs of persons with unusually high capacities or special talents.[10]

Notwithstanding the advances it brought, the concept of SEN – like that of integration – suffers from a number of limitations that explain why it is currently being called into question:

- It is frequently used interchangeably with the concept of students with disabilities, or as a new category establishing a division within this group, as references are often made to students with special educational needs that are associated or not associated with disability. *It would be more adequate to refer to the special educational needs of pupils rather than pupils with special educational needs,* but the long tradition of classifying pupils makes it different to change the paradigm towards a different form of categorisation based on the resources and support that must be provided – the essence of the concept of special educational needs.

- The very discussion of special educational needs separates some students from others and leads to the belief that their education is something special or additional in comparison with regular education, and that it falls within the of responsabilities "specialists".

- The association of special educational needs with additional unusual resources has brought with it the labelling of a large number of students as having special educational needs when in many cases, the root cause is unsuitable teaching. This labelling also has negative consequences both for the students (low self esteem and self image) and for the surroundings (low expectations and discrimination). It must be added that these labels tend to remain, as shown by the fact that students who have temporary special educational needs tend to continue to be labelled throughout their school life, even when they no longer experience learning difficulties.

- A fourth element of tension arises from the difficulty in applying the term in practice, when education administration bodies need to identify which students require specific or additional support and resources. As seen above, the interactive nature of special educational needs requires the evaluation of the pupil in interaction with the educational context, and this aspect of relativity is hard to reconcile with the functioning of education administration bodies that need advance warning of the size of the group that will require specific support and resources.

- Focusing attention only on the special needs of students diverts attention away from the promotion of changes in education practices and policies to respond to the diversity of all students, and education systems tend to maintain the status quo.

- Finally, the breadth and the relative nature of the concept of special educational needs can lead to complexity in the construction of an information system that requires the definition of categories with precise limits.

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10   This is the terminology used by UNESCO for the concept referred to in many countries as "giftedness".

4.4.3. Barriers affecting learning and participation, and support needs

More recently, Ainscow and Booth (2000) have given us the concept of barriers to learning and participation; which, although it is not been adopted in countries' education policies or legislations, is becoming ever more significant. These authors maintain that barriers arise from the interaction between the student and the different contexts in which they act: persons, policies, institutions, cultures, and social and economic circumstances that affect their lives. Thus, actions must be directed mainly towards the elimination of physical, personal, and institutional barriers that limit learning opportunities and full access and participation by all in educational activities.

The concept of barriers does not refer to individuals or to groups but rather stresses that it is the social context, with its policies, attitudes, and practices, that largely creates the difficulties and obstacles that impede or reduce certain students' possibilities for learning and participation. This interactive and contextual perspective leads to the belief that such social conditions can be changed (Echeita, 2006).

Another concept that is gaining ground in certain contexts is that of students with greater support needs, which emphasises actions external to the individual, and is based on the belief that all students are able to learn if they receive the necessary support. From a constructivist perspective, teaching processes are characterised by a set of aids and support systems that are provided to students in order to facilitate the learning processes, which may be more or less intense or significant, and more or less differentiated depending on the characteristics of each student.

The Convention on the Rights of Persons with Disabilities establishes that States must provide support in order to realise the right to education, ensuring that:

a) Reasonable accommodation of the individual's requirements is provided;

b) Persons with disabilities receive the support required, within the general education system, to facilitate their effective education:

c) Effective individualized support measures are provided in environments that maximize academic and social development, consistent with the goal of full inclusion.

The concepts of barriers and of support are two key elements in the definition of disability expressed in the Convention on the Rights of Persons with Disabilities, and constitute to central elements in this proposal's analytical model and indicators.

4.4.4. Attention to diversity

The diversity of cultures, contexts, and individuals in modern day societies cannot be denied, and this is reflected in schools. As human beings, we all share a number of characteristics that make us similar, and others that make us unique. Differences appear not only between groups (gender, cultures, socioeconomic level, etc) but also between individuals within each group (capacities, interests, motivations, world views) and within each individual (people pass through many identities of the course of their life as a result of new life experiences). Each student is the bearer of the number of differences, making the learning process unique in every case (Blanco, 2009).

The concept of attention to diversity refuses to recognise the distinction between students with and without special educational needs, because it is considered that all students are different and require different resources and support systems in order to access education, participate, and learn. There is also a great deal of diversity within the group of students with disabilities, arising from a number of variables related to individuals and the contexts in which they live; disability is also just one of many factors that influence their learning and development. The diversity of persons with disabilities is recognized in the preamble to the Convention on the Rights of Persons with Disabilities.

The paradigm of viewing diversity as a fundamental basis of education, beyond the mandate of any treaty or convention, arises as a consequence of the right to non-discrimination and requires that ever more effort is put into the inclusion of groups and persons subject to discrimination (Muñoz, V, 2007). The *Report of the Commission on Education for the Twenty-first Century* (UNESCO, 1996) puts forward respect for diversity as a fundamental principle in combating all forms of exclusion in education, and in returning education to its 'central role as a crucible' that contributes to social harmony.

Viewing differences in terms of standards – what is missing or what is different from what is "normal" or what is "frequent" – has led to differences being seen as difficulties or anomalies, and the creation of different options for those who are categorised as different – including students with disabilities. Conversely, a view of differences as something that is natural and "normal" among human beings and as an opportunity to enrich the processes of learning and socialization leads to the development of inclusive schools in which all students are educated together, regardless of their social and cultural origin or their individual characteristics and living situations, instead of developing schools or programmes that are segregated for different types of students.

In the field of education the concept of diversity brings us back to the fact that all students have their own specific educational needs in order to gain access to learning experiences, as a consequence of their social and cultural origins and of their personal characteristics in terms of capacities, motivations, interests, and rhythms and styles of learning. This means that absolutely all students are different, although the educational needs of certain students may require higher levels of support and differentiated resources.

Education systems currently face the challenge of finding a balanced response to the common and growing diversity present in all schools and classrooms, as a consequence of the advances that have been made in access to education throughout all phases of education. "Historically, the balance hgas shifted weighted towards what is common, with differences being seen as marginal; this has resulted in higher rates of repetition and dropout and low learning outcomes. The challenge now is to advance towards putting a greater value on diversity without forgetting what is shared by human beings, because to place too much emphasis on what makes us different may need to intolerance, exclusion, or fundamentalist postures that limit the development of people and of societies, or that are used to justify, for example, the creation of parallel curriculums for different cultures or for persons with special educational needs" (Blanco, 2009, Page 92).

Differences can turn into educational inequalities or into learning difficulties or difficulties in participation when certain students or groups do not enjoy equality of conditions in taking advantage of education opportunities, and in paradigms based on approaches that espouse homogeneity and that are blind to the uniqueness of each student, or which fail to value students' contribution to the process of learning. Students' progress depends not only on their individual characteristics but also on the characteristics of their educational context and the support that

they are provided or not provided. When the barriers are lower and when support is greater, students' learning and participation will be increased – and this model therefore addresses both of these aspects.

Attention to diversity and inclusive education should be two driving forces behind decision-making in education practice and policy, and require that advances be made towards education proposals (curriculums, assessment, learning environment, values, standards) that take the educational needs of all as a starting point, instead of being based on the idea of some imaginary standard student and then building individual adjustments or designs for those whose needs are not addressed in proposals based on ideas of homogeneity rather than diversity (Blanco, 2008). Universal learning designs and curriculums significantly reduce the need to make individualised curriculum adaptations or individual education plans. This approach also addresses the participation of teachers and families, taking account of their needs such that all may contribute to the development of more inclusive schools that welcome and attend to the diversity of the student body.

5. Analytical model

5.1. General considerations

A quality education without exclusion means that educational actions at all levels must be oriented towards ensuring that students not only access education, remain in the system, and conclude their studies, but also towards the maximum possible development, learning, and participation of each and every student. The following section defines the elements that constitute the centre of the analytical model (Ainscow and Booth, 2000).

Access and permanence: ensuring that all students may access school and other learning environments and remain there, eliminating barriers brought about through physical, economic, or institutional factors, or through prejudice, which limit students' ability to access education and to progress through it.

Participation: ensuring that all students participate as much as possible in the curriculum, educational and extracurricular activities, and community life, with respect for their opinions and points of view in decision-making that affects their lives. Students with disabilities are often unable to participate effectively in educational activities, and their views are not taken into account in decision-making that affects them, for example with regard to their path through the education system.

> "States Parties shall ensure that children with disabilities have the right to express their views freely on all matters affecting them, their views being given due weight in accordance with their age and maturity, on an equal basis with other children, and to be provided with disability and age-appropriate assistance to realize that right" (Article 7 of the Convention on the Rights of Persons with Disabilities)

Learning: ensuring that all students attain the maximum possible learning achievements, which is of particular relevance in the case of students with disabilities, as they are often victim to low expectations with regard to their learning potential. The final goal of education is to promote the development of different capacities through socially and culturally relevant learning experiences that permit socialization (as each child is introduced to his or her social environment) and individualization (as each child builds a personal and unique construction of these aspects of his or her living situation and builds his or her identity).

Therefore, the question to be answered is: what are the essential attributes of a quality education that promote full access, permanence, participation, and learning for all, including students with disabilities?

The analytical model adopts the model of education quality from a rights-based perspective, defined by OREALC/UNESCO Santiago (2007): relevance, pertinence, equity, efficacy and efficiency, with applicable adjustments and considerations in order to best respond to the target population for analysis in this information system.

It should be pointed out that the boundaries between the dimensions and the components that make them up are not always clearly defined, leading to a level of difficulty in placing certain indicators within applicable categories, and that certain indicators are highly interrelated across different categories or components.

5.2. Dimensions and categories

The following section describes the scope of the five categories defined, as well as the categories associated with each of them:

5.2.1. RELEVANCE

As stated in the section on the theoretical framework, relevance relates to the purposes and contents of education. The main purpose of education is to achieve the comprehensive development of persons and respect for human dignity, and education is therefore considered relevant if it promotes the learning of skills necessary to participate in the different activities of society, to face the challenges of today's knowledge society, to access appropriate employment, and to develop one's life project with regard to others; in other words, education must enable the socialization and individualization of persons.

For UNESCO (1996) education must develop skills related to the four pillars of learning identified in the report of the *International Commission on Education for the Twenty-first Century*: learning to know, learning to do, learning to be, and learning to live together.

The overall aims of education and the objectives established for each level of education must be the guiding principle for the education of all students, without any kind of exception. In fact, the purposes of education expressed in Article 24 of the Convention on the Rights of Persons with Disabilities are similar to those established in international instruments on the right to education[11]:

a) The full development of human potential and sense of dignity and self-worth, and the strengthening of respect for human rights, fundamental freedoms and human diversity.

b) The development by persons with disabilities of their personality, talents and creativity, as well as their mental and physical abilities, to their fullest potential.

c) Enabling persons with disabilities to participate effectively in a free society.

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[11]   The Universal Declaration of Human Rights (1948) states that education must be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups. The International Covenant on Economic, Social and Cultural Rights adds the sense of human dignity and further states that education must enable all persons to participate effectively in a free society. The Convention on the Rights of the Child ratifies this, and adds the aim of fostering respect for the natural environment, the child's cultural identity, language, and values, and respect for the values of the nation and of other civilizations.

This dimension includes the following category.

5.2.1.1. Purposes and contents of education

This category aims to investigate to what extent the aims of education and the standard curriculum are the guiding principle for the education of students with disabilities, regardless of whether they attend normal or special schools. This aspect is of particular relevance in the case of students with disabilities because in some countries parallel curriculums still exist for persons with certain types of disability or in special education centres.

One of the fundamental principles of inclusion is the promotion of the highest possible level of participation of all students in the curriculum and in educational activities in order for their learning to be successful. Countries' official curriculums can act as barriers or facilitators, depending on their characteristics, and this category will therefore investigate whether the official curriculum is flexible and whether it aims towards inclusivity. An inclusive curriculum must make a balanced consideration of the development of multiple intelligences, learning in students' native languages such as sign language, education in human rights, and the development of values such as non-discrimination, and placing value on differences or cooperation.

5.2.2. PERTINENCE

This dimension aims to measure the capacity of education systems to respond to different needs, characteristics, and identities of students, such that they may take ownership of the contents of their culture at both global and local levels, and develop their own identity (OREALC/UNESCO Santiago 2007).

Education must strike a difficult balance between commonality and diversity, ensuring that certain principles, objectives, and learning outcomes are shared by all, guaranteeing equal opportunities, while at the same time taking account of the diversity of students and of social and educational contexts in order to ensure the participation and learning of all persons. Many students experience learning difficulties and/or difficulties in participation because their social and cultural origins and their individual characteristics are not taken into account.

A pertinent education for all requires that advances be made towards universal designs, in which learning spaces, the curriculum, teaching, and assessment are diversified, and which have room for the needs of all students, instead of planning that is based on an "imaginary standard student" (in terms of capacities, needs, culture, or place of residence), and which builds individualised actions or special designs in order to respond to the needs of those students or groups who fail to fit into an education system that is based on a philosophy of homogeneity rather than diversity (Blanco, 2008).

Universal learning designs are flexible and allow the personalization of learning processes and contents, without this implying working in parallel, presenting contents in a variety of ways and allowing for different ways to participate in educational activities, as well as a wide range of possibilities for expression, which is particularly relevant in the case of students with disabilities.

This dimension comprises three categories, which are described below.

5.2.2.1. Attention to diversity

This category relates to regulatory aspects linked to respecting and valuing diversity, and in particular the right of students with disabilities to quality education, and to be educated alongside their peers in the regular schools of their community. The Convention on the Rights of Persons with Disabilities establishes the requirement that States Parties, in order to realise the right to education, children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability.

5.2.2.2. Accessibility/adaptability

Accessibility and adaptability, as shown in the conceptual framework, are two of the parameters used to evaluate compliance with the right to education and are indispensable in ensuring the access, participation, and learning of students with disabilities under equal conditions with others. The principle of accessibility implies the design of products, settings, programmes, and services that can be used by all persons, to the greatest extent possible, without recourse to adaptation or specialised design. Accessibility relates not only to physical access, but also to information, communications, the curriculum, and educational activities.

Nonetheless, universal design does allow for certain adjustments or adaptations to be made for persons with disabilities or other students, when necessary.

The following aspects are investigated in this category:

- Physical accessibility: architectural designs that facilitate access by all persons to the school and to its different educational spaces, with the highest possible level of autonomy in mobility. A universal design should include features such as ramps with safety rails; staircases with handrails; simple signage with universal meaning; elevators of a sufficient size, which stop at the exact level of the floors served, and with buttons within the reach of wheelchair users; suitable toilet facilities; illuminated and acoustic alarm systems; wide, easily opened doors.

- Communication codes that is complementary or alternative to spoken and written language. The learning of these codes is vital, not only in order to ensure communication but also in order to gain access to the learning outcomes set forth in the curriculum under equal conditions with others. The Convention on the Rights of Persons with Disabilities requires that States Parties facilitate the learning of Braille, alternative script, augmentative and alternative modes, means and formats of communication.

- Specific equipment and materials. There is often a need to provide certain specific equipment and materials that facilitate the autonomy, participation, and learning of students with disabilities; Braille typewriters; electricity boxes; wheelchairs; headsets, voice communicators (digitized or synthetic), specific software, etc. In other cases, it is sufficient to make adaptations to materials in standard use to enable their usage by all children, such as: incorporation of magnets into puzzles; increasing the size or thickness of the font used in a text; simplifying grammatical structure or substituting certain terms in order to aid comprehension.

5.2.2.3 Support services

UNESCO (2001) defines support as all human resources that complement or reinforce the pedagogical activity of teachers in order to respond to the educational needs of all students,

paying particular attention to those who require the most assistance in order to optimise their development and to participate and advance in their learning. This reinforcement constitutes a continuum that can range from support between students, teachers, and families involved in the schools themselves, through to specialised support such a support teachers, guidance personnel, psychologists, audiologists, speech therapists, and interdisciplinary teams.

For the purposes of this information system, the concept of support is restricted to those services or professionals that provide specialized assistance for educational purposes, addressing the specific needs or characteristics of students in order to optimize their learning and participation. The services and personnel who provide support vary widely between countries, are organized a wide variety of ways, and have different functions. The most frequent are teachers with specialized training, guidance personnel, psychologists, sign language interpreters, social workers, audiologists and speech therapists, specialized teaching psychology teams, and community or district support centres. These may be internal or external to education centres and may be organized by the education sector or other sectors.

Regardless of the way in which they are organized, the professionals to undertake support services in each country must work in collaboration with teachers, each contributing his or her own knowledge and experience in order to work jointly to identify and solve education problems and to provide integrated responses to the needs of students and their families.

From the perspective of inclusive education, support is oriented principally towards the prevention and resolution of issues related to the barriers that limit or impede students' learning and participation. Priority is placed on work with teachers and families in a continuous effort to enhance their capacities to meet the needs of children and young people, and emphasis is placed on the direct support of students in the classroom, progressively promoting their independence from such support.

It must be stressed that no universal relationship exists between the provision of support services and students with disabilities. First, not all students with disabilities require such support, or may not require permanent support throughout their schooling. Second, the need for certain forms of support depends on the capacity of schools and teachers to meet the needs of students.

5.2.3. Equity

This dimension relates to the capacity of the education system to ensure the principle of equal opportunities and access to education, quality of education processes, and learning outcomes at a universal level. From a rights based approach, advances must be made towards equality of conditions, allowing all students to fully develop their potential and achieve the highest possible levels of learning.

This principle has a very special meaning in the information system under development, given that the system is oriented towards a group that has historically been rendered invisible or directly ignored, and which has not been guaranteed the right to a quality education with equal opportunities.

Equity implies providing each student with the support and resources that he or she requires in order to enjoy equal conditions in taking advantage of education opportunities, in participating and in learning. One of the objectives of the information system is to identify the needs of students

with disabilities in terms of material, human, and technical resources, and to determine to what extent these requirements are met by education systems in order to guarantee equal opportunities with others. The availability of this information is of great relevance for decision-making in education policy and resource provision.

This dimension includes two closely related categories: the first relates to the equal opportunities that are the right of persons with disabilities; the second analyses differences within this group, investigating inequalities based on geography, age, ethnicity, and gender.

The categories defined are:

5.2.3.1. Equality of opportunities. From the perspective of equity, a balance must be struck between the principles of equality (what is normal) and differentiation (what is diverse). Education must offer differentiated treatment in the face of inequalities of origin in order to achieve fair learning outcomes and in order to avoid perpetuating the inequalities that exist in society (OREALC/UNESCO Santiago, 2007).

Differentiated treatment, which is not discriminatory or exclusive, means not only giving most to those who have least but also giving each person the resources that he or she requires customizing the assistance provided. Students with disabilities need a variety of specific equipment and materials or means of transport that must be guaranteed by education authorities or other sectors of government. Given the high indices of poverty associated with disability, other types of assistance may have to be contemplated, such as food or scholarships, and efforts must be made to eliminate the economic barriers that limit disabled students' access and permanence in education systems. To this end it must be ensured that protection systems take account of the needs of students with disabilities.

5.2.3.2. Disparity along socio-demographic lines. Moving towards equity requires verifying whether national progress or challenges identified have a positive or negative effect of all people equally, or whether they are distributed among the population in such a way as to perpetuate and/or aggravate social inequalities that arise from life situations beyond the sphere of education. This category relates to the identification of disparities within the group of persons with disabilities, denoting discriminatory factors with regard to the exercise of the right to education. The category takes account of disparities by gender, area of residence, and ethnicity (OREALC/UNESCO Santiago, 2008).

5.2.4. Efficacy

The term 'efficacy' refers to the capacity of education systems to comply with their objectives and obligations and to perform their functions. This dimension incorporates the analysis of outcomes and aspects related to human resources, practices, and curriculum management. The optimisation of teaching and learning processes implies not only offering the resources and supports necessary in order to respond to the educational needs of persons with disabilities, but also responding to the requirements of teachers in meeting these needs, providing teachers with the tools necessary to allow them to identify the help and support that must be offered to students with disabilities through both initial teacher training and in-service teacher training.

The categories considered are:

5.2.4.1.   *Access and completion of studies.* One of the basic conditions in realising the right to education is access to educational services as the start of a student's path through education. The availability of information on the different entry points to the education system permits the proportion of the population receiving such services to be gauged, thus determining the size of the excluded population. Access is a necessary condition in ensuring the right to education, but alone it is not sufficient as it does not guarantee that students remain in the education system, that they learn, and that they complete compulsory education (OREALC/UNESCO Santiago 2008). The term 'completion of studies' refers to graduation and certification at a set educational level (primary, secondary, or tertiary). In some countries graduation is contingent on passing one or more examinations, while in others it is an automatic consequence of having accumulated a set number of hours of education.

5.2.4.2.   *Teachers.* The quality of teachers and the environment that they generate in the classroom, excluding variables external to the school, are important factors in explaining students' learning outcomes. The countries of the region face the challenge of implementing policies and strategies that guarantee that teachers possess suitable ethical and professional competencies, and the tools necessary to realise the right of all students to fully learn and develop. Additionally, inclusive education requires the training and hiring of teachers representative of the diversity present in society (OREALC/UNESCO Santiago 2008).

According to the standards defined by the UNESCO Institute for Statistics (UIS) teaching personnel are defined as persons who are officially empowered, fulltime or part time, to guide and oversee the learning experience pupils and students, regardless of the professional qualifications that they hold. The definition excludes education personnel who are not directly involved in teaching (for example school principals or teaching centre management personnel who do not teach classes).

In accordance with the definitions of the UIS, specific or specialised training refers to personnel with initial education or postgraduate qualifications in special education in general or associated with different areas of specialty such as hearing and language, blindness, etc.

The term 'continuing training' refers to the training received by teachers in order to strengthen their professional and ethical capacities, thus exerting a positive influence on the quality of teaching. Within the scope of SIRIED, relevant training issues include those linked to attention to diversity, inclusive education, knowledge of disabilities, and identification of barriers that can limit participation and learning, and teamwork.
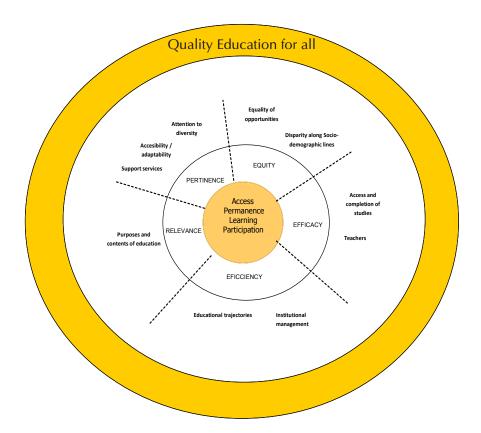
5.2.5. Efficiency

Efficiency is related to the responsible usage public resources earmarked for education, achieving the maximum possible results with the minimum possible resources, and resource management models. It also addresses the issue of institutional management, analysing education

community participation mechanisms (teachers, students, and families) and community partnerships mediated by local authorities, the private sector, and NGOs.

Two categories are included:

5.2.5.1. Education trajectories: One of the objectives of the information system is to gain knowledge of the education situation of students with disabilities, implying the acquisition of information about not only their access to education but also their school biographies (grade repetition, falling behind, delayed entry into schooling, dropping out). The path through education is the theoretical or desirable path that a student should follow through the education system, and does not necessarily correspond to the path taken by each student (Terigi F. cited in Blanco, Hirmas and Eroles, 2009). This path may be affected by a late entry into education, falling behind as a result of repeating grades, and in many cases by abandonment of the school system (dropping out).

5.2.5.2. Institutional management: The achievement of progress towards a quality education for all requires a new school model and the development of policies that facilitate its application in the real world. Changes are necessary in the education practices, organization, and culture of schools in order to allow the participation and learning of all students; the construction of collaborative learning communities; and opening schools to families and to the community.

This analytical model is shown in the diagram below:

6. Indicators

The identification of relevant and meaningful indicators that respond to the needs and concerns set forth for each of the categories of the dimensions of the analytical model was not an easy task. As mentioned in previous sections, the indicators that all considered relevant and pertinent in each of the subject areas investigated were subjected to a number of validation and feasibility analysis steps. As a result of this process, 42 indicators were selected for integration into the information system, of which 23 are quantitative and 19 qualitative.

It must be reiterated that the indicators that are proposed the system of indicators defined by OREALC/UNESCO Santiago for the assessment of the quality of Education for All, focusing specifically on a group of persons who have historically been made invisible or directly ignored in statistics and information systems; these indicators shall allow the development of a broader and more integrated view of the education situation of persons with disabilities, and more precise monitoring of advances with regard to the objectives of Education for All.

Each dimension and category is associated with indicators that are exclusively qualitative (e.g. Dimension: relevance. Category: purposes and contents of education); exclusively quantitative (e.g. Dimension: efficacy. Category: access and completion); or a combination of both types (e.g. Dimension: pertinence. Category: attention to diversity). When possible for the subject area at hand, different types of indicators are proposed (qualitative or quantitative) in order to obtain different viewpoints and introduce a triangulation of information. For example, in the category 'attention to diversity', under the 'pertinence' dimension, one indicator investigates the presence of regulations that ensure the right of persons with disabilities to access an inclusive education (qualitative indicator 5), and this is contrasted with the percentage of students with disabilities enrolled in regular schools in the system (quantitative indicator 9). This permits the gauging of the distance between the declarative level and reality.

An equally significant challenge is the availability of data to construct the proposed indicators. Based on the background information described in the previous sections and on the indicators selected, data gathering instruments have been designed for use in surveys to be applied in the Ministries of Education of the countries of the region. The statistics offices of the Ministries of Education of the countries should, in line with necessities, introduce modifications to their main data acquisition systems or surveys as necessary in order to meet these requirements. There is only one subject area incorporated into the system that is outside of the scope of these education statistics systems: the estimation of the number of persons with disabilities excluded from the education system, which should be determined from population censuses or specific surveys. A significant event in this regard was the inclusion of disability for the first time as a matter of interest in the revision of principles and recommendations for the 2000 World Population and Housing Census Programme.

The following section presents a matrix showing the dimensions, categories, and indicators that comprise the information system, and further information on each indicator, addressing its specific characteristics – be they quantitative (definition, purpose, calculation method, required data, statistical sources, disaggregation) or qualitative (purpose, descriptors).

6.1. Indicator matrix

DIMENSIONS	CATEGORIES	INDICATORS
RELEVANCE	Purposes and contents of education	1. It is recognized that the general objectives and goals of education are the same for all students. 2. The shared curriculum is the guiding principle for the education of all students, without any kind of discrimination. 3. The curriculum exists designed along inclusive lines, taking into account the diversity of learning needs of all students
PERTINENCE	Attention to diversity	4. The right to education for persons with disabilities is guaranteed, under equal conditions with others. 5. The right of persons with disabilities to access an inclusive education institution is guaranteed for all levels of teaching. 6. Access for children with disabilities to early childhood care and education programmes and services is promoted. 7. The development of new methodologies that facilitate learning and participation for all students is promoted 8. Assessment and graduation procedures take into account the specific needs and characteristics of students with disabilities 9. Percentage of students with disabilities enrolled in regular education, by level of education. 10. Number of civil society organizations that participate and the promotion and protection of the right to education for persons with disabilities.
	Accessibility/adaptability	11. Communications codes that are complementary or alternative to spoken and written language are learned in order to guarantee that students with disabilities can learn and participate. 12. Criteria and guidelines exist for the use of the universal design in the construction of school buildings. 13. Percentage of school buildings with universal design or infrastructure or adaptations that guarantee physical accessibility for all. 14. Percentage of students with disabilities who receive the specific materials and equipment that they need in order to participate and access the curriculum, by level of education. 15. Percentage of students with disabilities to access communications codes that are alternative and/or complementary to written and spoken language that they need in order to guarantee access to information, participation, and learning, by level of education. 16. Procedures are designed for the identification of barriers and of support and resources required by students with disabilities.

45

PERTINENCE	Support services	17. Support services designed along inclusive lines exist in order to promote learning and participation by all students. 18. Percentage of regular education establishments that include students with disabilities and receive support services, by level of education.
EQUITY	Equal opportunities	19. Cross sector policies exist in order to guarantee equal conditions for persons with disabilities in fully exercising their right to education. 20. Economic barriers are identified, and policies and measures are adopted in order to guarantee that education is free for persons with disabilities. 21. Percentage of students with disabilities who are beneficiaries of transport, scholarship, and meal services, by type of disability. 22. Percentage of regular education establishments that attend to students with disabilities, by type of management and level of education. 23. Percentage of education establishments for young people and adults that attend to students with disabilities, by type of management and level of education. 24. Specific enrolment rates by single year of age of the population with disabilities aged between zero and 24 years.
	Socio-demographic disparities	25. Percentage distribution by gender of students with disabilities, by type of disability. 26. Ratio between numbers of students with disabilities by gender, and total male and female enrolment rates in the system, by level of education.. 27. Ratio between number of students with disabilities and total students enrolled in urban and rural areas, by level of education. 28. Number of students with disabilities enrolled per 1000 students enrolled in the education system by ethnicity and gender, and by level of education.
EFFICACY	Access and completion of studies	29. Number of students with disabilities per 1000 students enrolled in the education system, by level of education and type of disability. 30. Number of students with disabilities per 1000 students enrolled in the formal and non-conventional education system, by single year of age, aged between 0 and 6 years. 31. Number of graduates with disabilities per 1000 graduates in the education system, by level of education and type of disability.
	Teachers	32. Percentage of teachers who receive continuous training related to inclusive education, attention to diversity, and the educational needs of students with disabilities, by level of education. 33. Percentage of teachers with disabilities, by level of education and type of disability. 34. Teacher training includes competencies related to attention to diversity and the development of inclusive education.

| EFFICIENCY | Paths through education | 35. Percentage of students with disabilities who pass, who fail, and to abandon the education system, by level of education and type of disability.
36. Percentage of students with disabilities enrolled in regular education, repeating a grade, by level of education.
37. Students with disabilities enrolled in regular education, who have fallen behind by 2 or more grades.
38. Percentage of students with disabilities who enrol at special education centres after having passed through regular education, by type of disability. |
| | Institutional management | 39. The development of institutional education projects designed along inclusive lines is promoted.
40. The participation of all students in decision-making processes is guaranteed.
41. Opportunities for family participation are established.
42. Community participation is promoted in attending to the diversity of students. |

6.2. Technical specifications

DIMENSION: Relevance

CATEGORY: Purposes and contents of education

1. Indicator: *It is recognized that the general objectives and goals of education are the same for all students.*

Purpose: The purpose of this indicator is to determine whether the purposes of education and the general objectives of each level of education are the guiding principle for the education of students with disabilities regardless of whether they attend regular or special schools.

2. Indicator: *The shared curriculum is the guiding principle for the education of all students, without any kind of discrimination.*

Purpose: monitoring whether countries possess a curriculum that is used as a guiding principle for the education of all students, with the necessary diversifications or adjustments, or whether different curriculums are used for persons with disabilities or at special education centres. From a perspective of inclusion, parallel or differentiated curriculums used for certain groups of the population must be eliminated.

3. Indicator: *The curriculum exists designed along inclusive lines, taking into account the diversity of learning needs of all students.*

Purpose: The purpose of this indicator is to evaluate whether the countries' curriculums are designed along inclusive lines, permitting participation and learning by all students.

Methodology:

The following descriptors are defined:

3.1. The curriculum includes learning outcomes centred on the balanced development of different capacities and multiple intelligences.

3.2 The curriculum develops understanding, respect, and valuing of diversity

3.3 The curriculum promotes learning outcomes centred on the construction of students' identity.

3.4. The curriculum promotes the values of solidarity, cooperation, and mutual understanding as a building block for coexistence.

3.5. The curriculum promotes knowledge and application of human rights and of the equality of rights of all groups within society.

3.6. The curriculum promotes intercultural and bilingual life

DIMENSION: Pertinence

CATEGORY: Attention to diversity

4. Indicator: *The right to education for persons with disabilities is guaranteed, under equal conditions with others.*

Purpose: Determining whether national and/or State legislative and regulatory structures are explicit with regard to the right to education for persons with disability under equal conditions with others, and whether oversight and enforcement measures and mechanisms are adopted to guarantee compliance with this right.

Methodology:

The following descriptors are proposed:

4.1. The right of all children, young people, and adults with disabilities to receive a quality education from birth and throughout their lives is established.

4.2. The right of persons with disabilities to a compulsory and free education is established.

4.3. Mechanisms and procedures exist for the enforcement of the right to education.

4.4. Mechanisms exist for the monitoring of compliance with the right to education of people with disabilities.

5. Indicator: *The right of persons with disabilities to access an inclusive education institution is guaranteed for all levels of teaching.*

Purpose: The evaluation of advances made in countries with regard to the development of education policies and regulations that realise the right of persons with disabilities to receive education in the regular schools in their community.

Methodology:

The following descriptors are proposed:

5.1. A broad approach to inclusive education is adopted.

5.2. A policy and plans exist for the development of inclusive education establishments at all levels of teaching

5.3. It is established that persons with disabilities attend the regular schools of the community in which they live.

5.4. Regulations exist to prohibit and punish discrimination in education, making explicit reference to discrimination in the regular system for reasons of disability.

6. Indicator: *Access for children with disabilities to early childhood care and education programmes and services is promoted.*

Purpose: The verification of advances made in countries and the development of early childhood care and education policies that place a priority on attention to children with disabilities and the support that they require, given that the first years of life are particularly important in compensating for children's difficulties and facilitating their educational inclusion throughout their time in school.

Methodology:

The following descriptors are defined:

6.1　Policies and legislation recognise the importance of early childhood care and education for children with disabilities.

6.2　Services exist for the early identification of the needs of children with disabilities and their timely entry into early childhood care and education programmes and services.

6.3　Programmes and actions are designed such as to take account of the opinions of parents, authorities, and the public at large with regard to the importance of early childhood care and education, due to its impact on children's development of children.

7. Indicator: *The development of new methodologies that facilitate learning and participation for all students is promoted.*

Purpose: Investigation of whether the policies and guidelines of the education authorities promote the development of universal learning designs that permit the participation of all students without losing sight of the needs of each student. The mere existence of policies does not guarantee the development of inclusive schools and practices but it is an indicator of the priority and significance ascribed to inclusion by education authorities.

Methodology:

The following descriptors are used:

7.1 Guidelines are provided for the development of universal learning designs that are pertinent to the educational needs of all students.

7.2. The usage of a variety of methods and materials permitting different forms of presentation, expression, and participation by students with disabilities is promoted.

7.3. Student-centred teaching and cooperative learning are promoted

The development of a positive emotional and interpersonal climate is promoted.

8. Indicator: *Assessment and graduation procedures take into account the specific needs and characteristics of students with disabilities.*

Purpose: Determining to what extent assessment processes and criteria for graduation take into account the needs and requirements of students with disabilities in order to provide them with equal conditions with others.

Methodology:

The following descriptors are proposed

8.1. Emphasis is placed on the importance of assessing the potential of students with disabilities and not only their difficulties.

8.2. Resources and aids are provided in order to guarantee the participation of students with disabilities in assessment processes under equal conditions, for instance giving them more time, the use of codes such as sign language, and resources such as Braille typewriters or adapted computers.

8.3. Criteria for graduation and certification take into account the particular situation of students with disabilities, without this leading to low expectations of their potential, in guaranteeing equal opportunities in their path through schooling.

8.4. The usage of a range of assessment instruments and procedures that are adjusted to the different styles, capacities, and means of expression of students is promoted.

9- Indicator: *Percentage of students with disabilities enrolled in regular education, by level of education.*

Definition: The proportion of students with disabilities enrolled in regular educational establishments at a given level of education, with regard to the total number of students with disabilities enrolled at that level, expressed as a percentage.

Purpose: Evaluation of advances made in countries in regard to the right of students to be educated in the regular schools of their community, without experiencing discrimination related to their disability. This indicator gives an index of the volume of students enrolled in special schools. This provides information on the priority assigned by countries to inclusive education and on the efforts that must be made in order to ensure the availability of sufficient places in regular schools for students with disabilities.

Calculation method:

$$\%MD(ER)_n^t = \frac{MD(ER)_n^t}{MD_n^t} * 100$$

Where:

$\%MD(ER)_n^t$: Percentage of students with disabilities enrolled in regular education at level "n" in school year "t"

$MD(ER)_n^t$: Number of students with disabilities enrolled in regular education at level "n" in school year "t"

MD_n^t : Total number of students with disabilities enrolled at level "n" in both regular and special education, in school year "t"

t: school year

n: level of education. Not including levels 4, 5, and 6 of the corresponding classification

Disaggregation: Inasmuch as is possible given available statistics, the indicator should be broken down by type of disability in order to identify which students with disabilities experience the highest levels of exclusion.

Source: Statistics departments of the Ministries of Education of the countries of Latin America.

Data required: Students with disabilities enrolled in regular education and in special education, by level of education.

Desegregation by type of disability or requires the number of students enrolled in each modality by level of education and by type of disability.

10. Indicator: *Number of civil society organizations that participate and the promotion and protection of the right to education for persons with disabilities.*

Purpose: This gives an indication of the commitment of civil society to the promotion, protection, and defence of the right to education for people with disabilities. The availability of a directory of organisations will not only permit the quantification of the number of organisations, but will also provide information on the type of actions that are being undertaken and the partnerships that could be forged with civil society.

Calculation method:

$COSC^{t}$: number of civil society organizations that participate in the promotion and protection of the right to education of persons with disabilities in year "t".

t: school year

Source: Registries of civil society organizations or nongovernmental organisations of the countries.

National Disability Councils

Key national information sources

Disaggregation: By activity/service of the institutions (categorisation pending).

CATEGORY: Accessibility/adaptability

11. Indicator: *Communications codes that are complementary or alternative to spoken and written language are learned in order to guarantee that students with disabilities can learn and participate.*

Purpose: Verification of the existence of explicit policies oriented towards guaranteeing the right of students to learn communication codes that are alternative or complementary to written and spoken language, and whether measures are adopted for teaching in these codes. Learning in these codes constitutes an essential element for participating and learning, and realises the right to education.

Methodology:

The following descriptors are defined

11.1. The curriculum makes reference to learning communication codes that are alternative or complementary to written and spoken language.

11.2. A policy exists to guarantee the learning of communication codes that are alternative or complementary to written and spoken language.

11.3. Measures are adopted to ensure the availability of teachers, including disabled teachers, trained in sign language, Braille, and other communications systems.

12. Indicator: Criteria and guidelines exist for the use of the universal design in the construction of school buildings.

Purpose: The purpose of this indicator is to investigate whether regulatory measures and dispositions ensure students' accessibility and autonomous mobility in education centres.

Methodology:

The following descriptors are defined

12.1. Regulations and/or measures are defined in order to guarantee that new school buildings meet the needs of accessibility for all, with particular attention to the requirements of persons with disabilities.

12.2. Measures are adopted to guarantee accessibility in current school buildings.

12.3. Incentives are provided for the construction/renovation of school buildings in line with the principles of accessibility for all.

13. Indicator: Percentage of school buildings with universal design or infrastructure or adaptations that guarantee physical accessibility for all.

Definition: This is the relationship, expressed as a percentage, between the number of school buildings that comply with each of the architectural conditions defined in the country's regulations and the total number of school buildings.

Purpose: Evaluation of progress with regard to accessibility of school buildings and of different educational spaces, considering the needs of students with disabilities.

Calculation method:

$$\%CE_a^t = \frac{CE_a^t}{CE^t} * 100$$

Where:

$\%CE_a^t$: Percentage of school buildings that comply with specified architectural conditions, in school year "t"

CE_a^t : Number of school buildings that comply with architectural condition "a" in school year "t"

CE^t : Total number of school buildings in school year "t"

"**t**" school year

"**a**" Architectural condition:

* Suitable entry routes

* Suitable/adapted bathrooms

* Adaptations within the buildings

Source: Statistics departments of the Ministries of Education of the countries of Latin America.

Data required: Total number of school buildings (all levels and modalities).

Number of school buildings (all levels and modalities), by compliance with specified architectural conditions.

14. Indicator: *Percentage of students with disabilities who receive the specific materials and equipment that they need in order to participate and access the curriculum, by level of education.*

Definition: This is the relationship, expressed as a percentage, between the number of students with disabilities enrolled at a particular educational level who receive the specific materials and equipment, and the total number of students with disabilities enrolled at this level who require such materials and equipment.

Purpose: The purpose of this indicator is to provide information on the capacity of education systems to respond to the needs of students with disabilities in terms of materials and equipment in order to ensure their autonomy, participation, and learning under equal conditions with others. This indicator allows the gap between potential needs and fulfilled needs to be identified.

Calculation method:

$$\%MD(AE)^t_{q,n} = \frac{MD(AE)^t_{q,n}}{MD(NE)^t_{q,n}} * 100$$

Where:

$\%MD(AE)^t_{q,n}$: Percentage of students with disabilities who received specific materials and equipment, for type of equipment "q" and level of education "n" in school year "t"

$MD(AE)^t_{q,n}$: Number of students with disabilities enrolled at level of education "n" who have access to specific materials and equipment "q" in school year "t"

$MD(NE)^t_{q,n}$: Number of students with disabilities enrolled at level "n" who need specific materials and equipment "q", in school year "t"

t: school year

n: level of education

q: type of equipment

* Adapted furniture

* Adapted computers

* Specific software

* Materials in Braille or other codes and formats

* Other

Note: a single student is accounted for as many times as the number of items of equipment that he or she receives and requires. The number of students enrolled in all modalities should be used.

Source:

Statistics departments of the Ministries of Education of the countries of Latin America.

Data required:

Number of students with disabilities who need each defined item of specific materials and equipment, by level of education.

Number of students with disabilities who receive each defined item of specific materials and equipment, by level of education.

15. **Indicator:** *Percentage of students with disabilities who access communications codes that are alternative and/or complementary to written and spoken language, that they need in order to guarantee access to information, participation, and learning, by level of education.*

Definition: This is the relationship, expressed as a percentage, between the number of students with disabilities enrolled at a particular level of education who access communications codes that are complementary or alternative to written and spoken language, with respect to the total number of students with disabilities enrolled at this level who require them.

Purpose: Monitoring of the extent to which students who need to learn a communications code that is complementary or alternative to written and spoken language have access to schooling in these codes. This indicator allows the gap between potential needs and fulfilled needs to be identified.

Calculation method:

$$\%MD(ACC)^t_{c,n} = \frac{MD(ACC)^t_{c,n}}{MD(NCC)^t_{c,n}} * 100$$

Where:

$\%MD(ACC)^t_{c,n}$ **:** Percentage of students with disabilities who access communication codes that are complementary or alternative to written and spoken language for type of code "c" and level of education "n" in school year "t"

$MD(ACC)^t_{c,n}$ **:** Number of students with disabilities enrolled at level of education "n" who access communication codes that are complementary or alternative to written and spoken language for type of code "c" in school year "t"

$MD(NCC)^t_{c,n}$ **:** Number of students with disabilities enrolled at level "n" who need to access communication codes that are complementary or alternative to written and spoken language for type of code "c", in school year "t"

t: school year

n: level of education

c: type of code

* Sign language

* Braille

* Total Communication

* BLISS

* Other

Source:

Statistics departments of the Ministries of Education of the countries of Latin America.

Data required:

Number of students with disabilities who require communication codes that are complementary or alternative to written and spoken language, by level of education.

55

Number of students with disabilities who access communication codes that are complementary or alternative to written and spoken language, by level of education.

16. Indicator: *Procedures are designed for the identification of barriers and of support and resources required by students with disabilities.*

Purpose: This indicator measures the level of institutionalisation of procedures to identify the barriers faced by students with disabilities, as well as their needs in terms of support and resources that should be provided in order to ensure their full participation and learning.

Methodology:

The following descriptors are used:

16.1 Guidelines and instruments are provided to identify the barriers faced by students with disabilities in accessing and remaining in school, participating, and learning.

16.2 Guidelines and instruments are provided to identify the support needs of students with disabilities.

CATEGORY: Support services

17. Indicator: *Support services designed along inclusive lines exist in order to promote learning and participation by all students.*

Purpose: The purpose of this indicator is to identify the existence of a regulations and guidelines that regulate the functioning of support services, along inclusive lines.

Methodology:

The following descriptors are defined:

17.1 Regulations that regulate the functioning, structure, and organisation of support services favour full inclusion.

17.2 Emphasis is placed on the need to provide support to students within the classroom.

17.3 Guidelines specify that support professionals work jointly with the school, alongside teachers and families.

17.4. Conditions for the adoption of cooperative working models between support professionals and regular teachers are promoted and generated.

17.5 The adaptation of special education centres into resource and support centres for community schools is promoted.

18. Indicator: *Percentage of regular education establishments that include students with disabilities and receive support services, by level of education.*

Definition: This is the relationship, expressed as a percentage, between the number of regular educational establishments at a particular level that include students with disabilities and receive support services, and the total number of regular educational establishments that include students with disabilities and need to receive support services.

Purpose: The purpose of this indicator is to gain information on the capacity of education systems to provide support to the schools that require it attending to the diversity and the needs of students with disabilities. This indicator provides an indication of the efforts that must be made in order to offer support to schools with the greatest needs.

Calculation method:

$$\%ER(MD)_n^{RSA,t} = \frac{ER(MD)_n^{RSA,t}}{ER(MD)_n^{NSA,t}} * 100$$

Where:

$\%ER(MD)_n^{RSA,t}$: Percentage of regular educational establishments at level "n" that attend to students with disabilities and receive support services in school year "t"

$ER(MD)_n^{RSA,t}$: Number of regular educational establishments at level "n" that attend to students with disabilities and receive support services in school year "t"

$ER(MD)_n^{NSA,t}$: Number of regular educational establishments at level "n" that attend to students with disabilities and require support services in school year "t"

n: level of education

t : school year

Source: Statistics departments of the Ministries of Education of the countries of Latin America.

Data required:

Number of regular educational establishments that attend to students with disabilities and require support services, by level of education.

Number of regular educational establishments that attend to students with disabilities and receive support services, by level of education.

Disaggregation:

By type of organization of support services.

DIMENSION: EQUITY

CATEGORY: Equal opportunities

19. Indicator: *Cross sector policies exist in order to guarantee equal conditions for persons with disabilities in fully exercising their right to education.*

Purpose: The purpose of this indicator is to provide information on the existence and scope of cross sector policies that guarantee integrated attention to the needs of persons with disabilities and equality of conditions in accessing education, participating, and learning.

20. **Indicator:** *Economic barriers are identified, and policies and measures are adopted in order to guarantee that education is free for persons with disabilities.*

Purpose: Evaluation of advances made by countries in guaranteeing a free education for persons with disabilities, particularly in the case of children and young people in situations of poverty and vulnerability.

21. **Indicator:** *Percentage of students with disabilities who are beneficiaries of transport, scholarship, and meal services, by type of disability.*

Definition: This is the percentage of students with a particular disability who benefit from transport, scholarship, all meals services.

Purpose: This indicator provides information on the number of students with disabilities receiving support in order to ensure equal opportunities. It also permits the identification of the efforts that must be made in order to attend to the needs of all students, and the assessment of the impact of measures adopted on access and permanence in the education system among students with disabilities.

Calculation method:

$$\%MD(BS)_{s,d}^{t} = \frac{MD(BS)_{s,d}^{t}}{MD_{d}^{t}} * 100$$

Where:

$\%MD(BS)_{s,d}^{t}$ **:** Percentage of students with disabilities who benefit from services of transport, scholarships, and meals, by type of disability "d" in school year "t"

$MD(BS)_{s,d}^{t}$ **:** Number of students with disabilities who benefit from services of transport, scholarships, and meals, by type of disability "d" in school year "t"

MD_{d}^{t} **:** Number of students by type of disability "d" in school year "t"

t : school year

d : type of disability

s : type of service

* Transport

* Scholarship

* Meals

Disaggregation:

By modality

Source:

Statistics departments of the Ministries of Education of the countries of Latin America. Statistics offices at ministries in charge of social policy and National Disability Councils.

Data required:

Total number of students with disabilities by type of disability and by modality.

Number of students with disabilities who receive services of transport, scholarships, or meals by type of disability and by modality.

22. Indicator: *Percentage of regular education establishments that attend to students with disabilities, by type of management and level of education.*

Purpose: This indicator permits the assessment of the level to which regular education schools accept children and young people with disabilities, and the efforts that must be made in order to ensure that all schools welcome diversity.

Definition:

This is the relationship, expressed as a percentage, between the number of regular education establishments under a specific type of management and at a specific level of education that attend to students with disabilities, with respect to the total number of regular education establishments of that management type and level.

Calculation method:

$$\%ER(MD)_{n,p}^{t} = \frac{ER(MD)_{n,p}^{t}}{ER_{n,p}^{t}} * 100$$

Where:

$\%ER(MD)_{n,p}^{t}$ **:** Percentage of regular education establishments that attend to students with disabilities, at level "n" and management type "p" in school year "t".

$ER(MD)_{n,p}^{t}$ Number of regular education establishments that attend to students with disabilities, at level "n" and management type "p" in school year "t".

$ER_{n,p}^{t}$ **:** Total number of regular education establishments, at level "n" and management type "p" in school year "t".

t: school year

n: level of education

p: management type

Disaggregation: By location or geographical area: urban or rural

Source: Statistics departments of the Ministries of Education of the countries of Latin America.

Data required:

Total number of regular education establishments, by level, management type, and area.

Number of regular education establishments that attend to students with disabilities, by level, management type, and area.

23. Indicator: *Percentage of education establishments for young people and adults that attend to students with disabilities, by type of management and level of education.*

Definition: This is the relationship between the number of educational establishments for young people and adults of a particular management type and level of education that attend to students with disabilities, with respect to the total number of education establishments for young people and adults of this management type and level, expressed as a percentage.

Purpose: This indicator complements indicator 22 and permits the assessment of the level to which establishments for young people and adults are open to receiving persons with disabilities.

Calculation method:

$$\%PJA(MD)^t_{n,p} = \frac{PJA(MD)^t_{n,p}}{PJA^t_{n,p}} * 100$$

Where:

$\%PJA(MD)^t_{n,p}$: Percentage of education establishments for young people and adults that attend to students with disabilities, at level "n" and management type "p" in school year "t".

$PJA(MD)^t_{n,p}$: :Number of education establishments for young people and adults that attend to students with disabilities, at level "n" and management type "p" in school year "t".

$PJA^t_{n,p}$: Total number of education establishments for young people and adults at level "n" and management type "p" in school year "t".

t: school year

n: level of education

p: management type

Disaggregation:

By location or geographical area: urban or rural

Source:

Statistics departments of the Ministries of Education of the countries of Latin America.

Data required:

Total number of education establishments for young people and adults, by level, management type, and area.

Number of education establishments for young people and adults that attend to students with disabilities, by level, management type, and area

24. Indicator: *Age specific enrolment rate of the population with disabilities aged between zero and 24 years.*

Definition: This is the percentage of all persons with disabilities aged between 0 and 24 years enrolled in the education system, regardless of level and modality.

Purpose: This indicator shows the level of participation in education of a specific age cohort of the disabled population. It also provides information on the percentage of persons with disabilities excluded from the education system. Comparison of this indicator with the rate of school attendance for a specific age of the total population will contribute to the description of inequality of opportunities in access and permanence in the education system among persons with disabilities. It must be stressed that the construction of this indicator requires data from population censuses or home surveys that include information on the population of persons with disabilities, whether or not they attend school.

Calculation method:

$$\%TEMD_e^t = \frac{MD_e^t}{PD_e^t} * 100$$

Where:

$\%TEMD_e^t$: Age specific enrolment rate of persons with disabilities, in school year "t"

MD_e^t : Number of students with disabilities, of age "e", in school year "t"

PD_e^t : Population with disability, of age "e", in school year "t"

e : age of persons aged 0 to 24, or data by five year age groups

t : school year

Note: for persons under the age of three, this indicators should include all types of educational attention (formal and non-conventional)

Source:

Statistics departments of the Education Ministries.

National Statistics Offices or similar offices tasked with national population censuses and household surveys, or similar.

Data required:

Number of students with disabilities enrolled in all modalities and educational levels by age or by five year age group.

General population (attending and not attending school) with disabilities, by age or by five year age group.

CATEGORY: Socio-demographic disparities

Purpose; The indicators grouped under this category aim to identify inequalities in access to education within the group of persons with disabilities, depending on gender, area of residence, and ethnicity.

In order to measure the lack of equity between two sub-populations, parity indexes are used, as in the case of gender parity index access to education or the enrolment parity index between urban and rural areas. The construction of parity indexes within the group of persons with disabilities with regard to gender, area of residence, or ethnicity, requires data on the total population with disability (both attending and not attending school) broken down by gender, area of residence, and other socio-demographic variables.

In view of the fact that most countries in the region do not possess this information, a suite of indicators is suggested in order to permit a comparative analysis that will make information on the existence of inequalities have access opportunities, and these proxy indicators must be interpreted in the light of the limitations of the situation.

25.- Indicator: *Percentage distribution by gender of students with disabilities, by type of disability.*

Definition:

This is the percentage of male and female students by type of disability, with respect to the total number of students with this disability.

Calculation method:

$$\%MD^t_{g,d} = \frac{MD^t_{g,d}}{MD^t_d} * 100$$

Where:

$\%MD^t_{g,d}$: Percentage of enrolment with disability of gender "g" and disability type "d", in school year "t"

$MD^t_{g,d}$: Number of enrolled persons with disability type "d", and gender "g" in school year "t"

MD^t_d : Number of enrolled persons with disability type "d" in school year "t"

t: school year

g: gender, male/female

d: disability type

Disaggregation:

By age group

By level of education

Source:

Statistics departments of the Ministries of Education of the countries of Latin America.

Data required:

Number of students with disabilities by gender and by type of disability. In order to make progress in the types of disaggregation proposed, data by level of education and by age group are also necessary.

26. Indicator: *Ratio between numbers of students with disabilities by gender, and the total male and female enrolments in the system, by level of education.*

Definition:

This is the relationship between the percentage of male students with disability at a particular level of education with respect to total enrolment of male students at this level, and the percentage of female students with disabilities with respect to the total enrolment of female students at this level.

Calculation method:

$$RG_n^t = \frac{\%VMD_n^t}{\%FMD_n^t}$$

$$\%VMD_n^t = \frac{VMD_n^t}{VM_n^t} * 100$$

$$\%FMD_n^t = \frac{FMD_n^t}{FM_n^t} * 100$$

Where:

RG_n^t : Ratio of students with disabilities by gender and total male and female students enrolled at level of education "n" in school year "t"

$\%VMD_n^t$: Percentage of male students with disabilities enrolled at level "n" with respect to the total enrolment of male students at level "n" and school year "t"

VMD_n^t : Number of male students with disabilities enrolled at level "n" and school year "t"

VM_n^t : Total enrolment of male students at level "n" and school year "t"

$\%FMD_n^t$: Percentage of female students with disabilities enrolled at level "n" with respect to total enrolment of female students at level "n" in school year "t"

FMD_n^t : Number of female students with disabilities enrolled at level "n" and school year "t"

FM_n^t : Total enrolment of female students at level "n" and school year "t"

n: level of education

t : school year

Disaggregation:

By type of disability.

Source:

Statistics departments of the Education Ministries.

UNESCO Institute for Statistics.

Data required:

Students with disabilities enrolled in the system by gender and level of education.

Total students enrolled by gender and level of education.

27. Indicator: *Ratio between number of students with disabilities and total students enrolled in urban and rural areas, by level of education.*

Definition:

This is the relationship between the percentage of students with disabilities enrolled in establishments located in urban areas at a particular level with regard to the total number of students enrolled in that level and area, and the percentage of students with disabilities enrolled in educational establishments located in rural areas at the same level with respect to the total enrolment in that level and area.

Calculation method:

$$RZ_n^t = \frac{\%MD(U)_n^t}{\%MD(R)_n^t}$$

$$\%MD(U)_n^t = \frac{MD(U)_n^t}{M(U)_n^t} * 100$$

$$\%MD(R)_n^t = \frac{MD(R)_n^t}{M(R)_n^t} * 100$$

Where:

RZ_n^t :Ratio between students with disabilities and total students enrolled in urban and rural areas, at level of education "n" and school year "t"

$\%MD(U)_n^t$: Percentage of students with disabilities enrolled in urban areas, at level of education "n" and school year "t"

$\%MD(R)_n^t$: Percentage of students with disabilities enrolled in rural areas, at level of education "n" and school year "t"

$MD(U)_n^t$: Number of students with disabilities enrolled in urban areas and level "n" in school year "t"

$M(U)_n^t$: Total enrolment in urban areas and level "n" in school year "t"

$MD(R)_n^t$: Number of students with disabilities enrolled in rural areas and level "n" in school year "t"

$M(R)_n^t$: Total enrolment in rural areas and level "n" in school year "t"

n : level of education

t : school year

Source:

Statistics departments of the Education Ministries.

Data required:

Students with disabilities enrolled in the education system (in all modalities) by level and by geographic area.

Total enrolment of students by level and by geographic area.

28. Indicator. *Number of students with disabilities enrolled per 1000 students enrolled in the education system by ethnicity and gender, and by level of education.*

Definition:

This is the quantity of students with disabilities of a specific ethnicity and gender enrolled in school at a particular level of education, for every thousand students enrolled at that level and belonging to the same ethnicity and gender.

Calculation method:

$$RMD^t_{i,g,n} = \frac{MD^t_{i,g,n}}{M^t_{i,g,n}} * 1000$$

Where:

$RMD^t_{i,g,n}$: Number of students with disabilities of ethnicity "i" and gender "g" at level of education "n" for each 1000 enrolled in the education system of ethnicity "i" and gender "g" at level "n"

$MD^t_{i,g,n}$: Number of students with disabilities in el school year "t" of ethnicity "i" and gender "g" at level "n"

$M^t_{i,g,n}$: **Total** students enrolled in the education system in school year "t of ethnicity "i" and gender "g" at level of education "n"

n : level of education

t : school year

g : gender

i : ethnicity

Source:

Statistics departments of the Ministries of Education.

Data required:

Students with disabilities enrolled in the education system by gender, by ethnicity, and by level of education attended.

Total number of students enrolled in the education system by gender, by ethnicity, and by level of education attended.

DIMENSION: EFFICACY

CATEGORY: Access and completion of studies

29. Indicator: *Number of students with disabilities per 1000 students enrolled in the education system, by level of education and type of disability.*

Purpose:

This indicator provides information on the relative number of students with disabilities per thousand students enrolled in the education system, as an approximation of the level of access at each level of education. This contributes to the assessment of the relative selectivity of the education system, affecting access by persons with disabilities to secondary and higher education.

Definition:

This is the number of students with a specific disability to attend school at each level per thousand students attending school in the formal education system at the same level.

Calculation method:

$$RMD_{d,n}^{t} = \frac{MD_{d,n}^{t}}{M_{n}^{t}} * 1000$$

Where:

$RMD_{d,n}^{t}$: Number of students with disability "d" in school year "t" for each 1000 enrolled in the education system at level "n"

$MD_{d,n}^{t}$: Number of students with disabilities "d" in school year "t" at level "n"

M_{n}^{t} : Total number of students in the education system in school year "t" at level of education "n" (not including adult education)

n : level of education

d : type of disability

t : school year

Source:

Statistics departments of the Ministries of Education. UNESCO Institute for Statistics (UIS)

Data required:

Students with disabilities enrolled, by type of disability and level of education.

Total number of students in the formal education system, by level of education.

Disaggregation:

By age for persons aged between 6 and 24.

30. Indicator: *Number of students with disabilities per 1000 students enrolled in the formal and non-conventional education system, by age, aged between 0 and 6 years.*

Purpose:

Indication of the relative proportions of students with disabilities by age in the 0 to 6 age group per 1000 enrolled at the same age in the formal and non-conventional education system. This allows an approximation of the level of access to education, or participation of a specific age cohort of children with disabilities, and the detection of any differences for each age.

Definition:

This is the number of students with disabilities attending school at a particular age for each 1000 students attending school in the formal and non-conventional system at the same age.

Calculation method:

$$RMDT_e^t = \frac{MDT_e^t}{MT_e^t} * 1000$$

Where:

$RMDT_e^t$: Number of students with disabilities by single year of age per 1000 enrolled at the same age in the formal and non-conventional education system

MDT_e^t : Number of students with disabilities enrolled in formal and non-conventional education by single year of age "e"

MT_e^t : Total enrolment in the formal and non-conventional education system, at single year of age "e"

e : age, between zero and six years

t : school year

Note: This includes those enrolled in ISCED97 Level 0, three year old children enrolled informal or school-type programmes and those enrolled aged between zero and six in non-conventional or non-school-type programmes.

Source:

Statistics departments of the Ministries of Education. UNESCO Institute for Statistics (UIS)

Data required:

Students with disabilities aged between zero and six years enrolled in the formal and non-conventional education system by single year of age.

Total number of students aged between zero and six years in the formal and non-conventional system by single year of age.

31. Indicator: *Number of graduates with disabilities per 1000 graduates in the education system, by level of education and type of disability.*

Purpose: This indicator aims to provide information on the relative number of graduates of basic education among persons with disabilities. Completion of each level of education is a prerequisite for continuation to the next level, and so the monitoring of completion of studies is fundamental in order to understand how paths through education can go wrong. The analysis of this indicator alongside access indicators also permits the verification of whether access levels are accompanied by the same levels of completion.

Definition:

Number of students with disability "d" graduating from level of education "n" for every one thousand students graduating from this level.

Calculation method:

$$RED_{n,d}^{t} = \frac{ED_{n,d}^{t}}{E_{n}^{t}} * 1000$$

Where:

$RED_{n,d}^{t}$: Number of graduates with disability "d" at level "n" for every 1000 graduates in the education system at level "n" in school year "t"

$ED_{n,d}^{t}$: Number of graduates with disability "d" at level "n" in school year "t"

E_{n}^{t} : Total number of graduates of level of education "n" in school year "t"

t : school year

d: type of disability

n : level of education

This indicator is only applied to ISCED97 levels 1 and 2.

Both regular and special education are included.

Source:

Statistics departments of the Ministries of Education. UNESCO Institute for Statistics (UIS)

Data required:

Number of graduates with disabilities at ISCED97 levels 1 and 2, by type of disability.

Total number of graduates of the education system, by level.

CATEGORY: Teachers

32. Indicator: *Percentage of teachers who receive continuous training related to inclusive education, attention to diversity, and the educational needs of students with disabilities, by level of education.*

Definition:

This is the relationship, expressed as a percentage, of the number of teachers at each level of education who received training on attention to diversity, inclusive education, and/or the educational needs of persons with disabilities during the preceding five year period, with respect to the total number of teachers at each level.

Purpose: This indicator provides information on the percentage of teachers, in both regular and special education, who have undertaken at least 40 hours per year of training activities in issues related to inclusive education, attention to diversity, and the educational needs of persons with disabilities. Although the mere act of attending training activities does not ensure the deve-

lopment of necessary attitudes and competencies, this indicator offers an approximation of the level of commitment and efforts undertaken by education authorities in order to make advances towards inclusive education.

Calculation method:

$$\%DC_n^t = \frac{DC_n^t}{D_n^t} * 100$$

Where:

$\%DC_n^t$: Percentage of teachers at level "n" who have received continuing training related to inclusive education, attention to diversity, and the needs of persons with disabilities during school year "t"

DC_n^t: Number of teachers at level "n" who have received continuing training related to inclusive education, attention to diversity, and the needs of persons with disabilities during school year "t"

D_n^t: Total number of teachers at level "n" in school year t

n: level of education

t : school year

Note: specialized support service teachers are included

Only training activities amounting to at least 40 hours per year should be included

Source: Statistics departments of the Ministries of Education. UNESCO Institute for Statistics (UIS).

Data required:

Number of teachers at each level trained in issues related to inclusive education, attention to diversity, and the educational needs of persons with disabilities.

Number of teachers per level.

33. Indicator: *Percentage of teachers with disabilities, by level of education and type of disability.*

Purpose: This indicator permits the assessment of advances made by countries in hiring teachers with disabilities, as established in the Convention on the Rights of Persons with Disabilities. Inclusive education requires the training of teachers who are representative of the diversity present in society and in schools.

Definition:

Number of teachers with disabilities who teach at a given level, expressed as a percentage of the total number of teachers at this level.

Calculation method:

$$\%D_{n,d}^{t} = \frac{D_{n,d}^{t}}{D_{n}^{t}} * 100$$

Where:

$\% DD_{n,d}^{t}$ **:** Percentage of teachers with disability "d" at level of education "n" in school year "t"

$DD_{n,d}^{t}$ **:** Number of teachers with disability "d" at level of education "n" in school year "t"

D_{n}^{t} **:** Total number of teachers at level "n" in school year t

n: level of education

t : school year

d: type of disability

Note: special support service teachers are included

Source:

Statistics departments of the Ministries of Education. UNESCO Institute for Statistics (UIS).

Data required:

Number of teachers with disabilities, by level and by type of disability.

Number of teachers at each level.

34. Indicator: *Teacher training includes competencies related to attention to diversity and the development of inclusive education.*

Purpose: The purpose of this indicator is to monitor the extent to which teacher training provides the knowledge and tools necessary for teachers to take responsibility for the learning of all students, regardless of their social or cultural origin and their individual characteristics.

Methodology:

The following descriptors are defined:

34.1 Continuing training actions and programmes are promoted in order to strengthen teachers' capacities in attention to diversity and inclusive education.

34.2 A number of training options related to the education of persons with disabilities are offered.

34.3 Guidelines are provided for the inclusion of competencies related to attention to diversity and the development of inclusive schools in initial teacher training curriculums.

34.4 It is a requirement for the certification of teacher training programmes that course content covers the areas of inclusive education and attention to diversity.

DIMENSION: EFFICIENCY

CATEGORY: Education trajectories

35. Indicator: *Percentage of students with disabilities who were promoted, who were not promoted, and who left the education system (drop out), by level of education and type of disability.*

Purpose: Gaining information on the paths through education of students with disabilities, and identifying inequalities within this group with regard to paths through education.

Definition:

This is the percentage of students with disabilities at a specific level of education and type of disability who have passed, failed, or abandoned their studies, with respect to the total number of students with disabilities at this level, and type of disability.

Calculation method:

$$\%AD_{n,d}^{t} = \frac{AD_{n,d}^{t}}{MD_{n,d}^{t}} * 100$$

$$\%NAD_{n,d}^{t} = \frac{NAD_{n,d}^{t}}{MD_{n,d}^{t}} * 100$$

$$\%ABD_{n,d}^{t} = \frac{ABD_{n,d}^{t}}{MD_{n,d}^{t}} * 100$$

Where:

$\%AD_{n,d}^{t}$ **:** Percentage of students with disability "d" who passed at level "n" in school year "t".

$\%NAD_{n,d}^{t}$ **:** Percentage of students with disability "d" who did not pass at level "n" in school year "t"..

$\%ABD_{n,d}^{t}$ **:** Percentage of students with disability "d" who abandoned schooling at level "n" in school year "t".

$AD_{n,d}^{t}$ **:** Number of students with disability "d" who passed, in level "n", in school year "t"

$NAD_{n,d}^{t}$ **:** Number of students with disability "d" who did not pass at level "n", in school year "t"

$ABD^t_{n,d}$ **:** Number of students with disability "d" who abandoned schooling at level "n" in school year "t"

$MD^t_{n,d}$ **:** Number of students with disabilities "d" enrolled at level "n" in school year "t"

t: school year

n: level of education

d: type of disability

Note: conditions for passing, failing, and abandonment are obtained from the final enrolment or the initial enrolment of the following school year. In the denominator, the total number of students enrolled refers to initial enrolment.

Source:

Statistics departments of the Ministries of Education.

Data required:

Students with disabilities who pass, fail, and abandon schooling, by type of disability and level of education.

Students with disability by level and type of disability.

36. Indicator: *Percentage of students with disabilities enrolled in regular education, repeating a grade, by level of education.*

Definition:

This is the number of students enrolled in the same grade (of a particular level) in which they were enrolled the previous year, expressed as a percentage of the total number of students with disabilities enrolled in regular education system of that grade and level.

Purpose:

Providing information on the proportion of students with disabilities enrolled in regular education, repeating a particular level of education, permitting the identification of possible interactions in their path through education and the adoption of measures to prevent grade repetition. This information is of great importance because repetition is very frequent in the case of students with disabilities who attend regular education centres.

Calculation method:

$$PRD(ER)^t_{j,n} = \frac{RD(ER)^t_{j,n}}{MD(ER)^t_{j,n}} * 100$$

Where:

$PRD(ER)^t_{j,n}$: Percentage of students with disabilities repeating a grade enrolled in regular education at grade "j" and level "n" in school year "t"

$RD(ER)^t_{j,n}$: Number of students with disabilities enrolled in regular education repeating a grade, at grade "j" at level "n" in school year "t+1"

$MD(ER)^t_{j,n}$: Number of students with disabilities enrolled in regular education in grade "j" of level "n" in school year "t"

j: grade

n: level of education

t : school year

Note: the percentage for the whole level is determined by dividing the total number of persons with disabilities repeating a grade in all grades at a specific level of education by the total number of students with disabilities at that level and multiplying the result by 100.

Source:

Statistics departments of the Ministries of Education.

Data required:

Number of students with disabilities enrolled in regular education and repeating a grade, by grade and by level.

Number of students with disabilities enrolled in regular education, by grade and by level.

Disaggregation:

By type of disability.

37. Indicator: *Students with disabilities enrolled in regular education, who have fallen behind by 2 or more grades.*

Purpose:

This gives an indication of the level to which students with disabilities fall behind in their schooling, which could indicate that the educational services that they are receiving do not meet their needs. Falling behind reflects the accumulation of repetitions of one or more grades and late entry into education.

Definition:

This is the percentage of students with disabilities of a particular age enrolled in regular education who have fallen two or more grades behind the grade corresponding to that age.

Calculation method:

$$\%MAD(ER)_e^t = \frac{MAD(ER)_e^t}{MD(ER)_e^t} *100$$

Where:

$\%MAD(ER)_e^t$ **:** Percentage of students with disabilities enrolled in regular education of age "e" who have fallen behind by 2 (two) or more grades

$MAD(ER)_e^t$: Number of students with disabilities enrolled in regular education in year "t" and age "e" who have fallen behind by 2 (two) or more grades

$MD(ER)_e^t$ **:** Number of students with disabilities enrolled in regular education, in year "t" and age "e",

e: age

t : school year

Source:

Statistics departments of the Ministries of Education.

Data required:

Number of students with disabilities enrolled in regular education by sinlge year of age and by grade.

Disaggregation:

By type of disability

38. Indicator: *Percentage of students with disabilities who enrol at special education centres after having passed through regular education, by type of disability.*

Definition:

This is the number of students with disability "d" enrolled in regular education in school year (t) who enrol in special education in the following school year (t + 1), for every thousand students enrolled with disability "d" in regular education in school year t.

Purpose: This indicator provides information on the extent to which students with disabilities remain in regular education centres during their time in school, realising their right to a lifelong inclusive education. This information is of great relevance because many students with disabili-

75

ties who attend regular schools return to special education centres, most of all during secondary education.

Calculation method:

$$\%MD(ER)^t(EE)^{t+1} = \frac{MD(ER)^t(EE)^{t+1}}{MD(ER)^t} * 100$$

Where:

$\%MD(ER)^t(EE)^{t+1}$: Percentage of students with disabilities enrolled in regular education in year t and in special education centres in year t+1

$MD(ER)^t(EE)^{t+1}$: Number of students with disabilities enrolled in regular education in year t and in special education centres in year t+1

$MD(ER)^t$: Number of students with disabilities enrolled in regular education in year t

t : school year

Source:

Statistics departments of the Ministries of Education.

Data required:

Number of students with disabilities enrolled in regular education.

Number of students with disabilities enrolled in regular education in a particular school year and in special education centres in the following school year.

CATEGORY: Institutional management

39. Indicator: *The development of institutional education projects designed along inclusive lines is promoted.*

Purpose: verification of the extent to which education policies and regulations promote the development of inclusive schools.

Method:

The following descriptors are defined:

39.1. Guidelines are provided for the development of institutional education projects along inclusive lines.

39.2. Times and spaces or set aside to facilitate collaborative work between teachers and reflexion on teaching practices.

40. Indicator: *The participation of all students in decision-making processes is guaranteed.*

Purpose: *Investigation of the existence of regulations regarding participation of students in decision-making in education and coexistence and the school, and the scope of these regulations.* Students with disabilities often have no effective participation in educational activities, and they are not consulted in decision-making processes that affect them, for instance with regard to their path through education.

Method:

The following descriptors are defined:

40.1. The participation of students in the planning of educational activities is promoted.

40.2. Opportunities are established for students to participate in the definition of school disciplinary and coexistence rules.

40.3. The opinion of students with disabilities is taken into account in decision-making affecting their path through education.

41. Indicator: Opportunities for family participation are established

Purpose:

Investigation of the existence of regulations that ensure the participation of families in decision-making relating to the management of education institutions, and the existence of actions promoting the involvement of families in the education of their children.

Methodology:

The following descriptors are defined:

41.1 Regulations promote the participation of parents in support of school management.

41.2 School-based actions oriented towards the intensification and optimization of parental participation are promoted.

41.3 Provisions are made for the right of parents to be consulted on decisions that affect their children, in terms of teaching psychology evaluations, curriculum-based decisions, and paths through education.

42. Indicator: Community participation is promoted in attending to the diversity of students**.**

Purpose: Inclusive education is a responsibility of society as a whole and relates to the wellbeing and participation of the education community as a whole. The purpose of this indicator is to generate information on regulations that promote, organize, and establish social participation mechanisms in support of the management of education institutions and that attend to the educational needs of all students, especially those with disabilities.

Methodology:

The following descriptors are defined:

42.1 Regulations promote social participation in support of the management of education institutions.

42.2 Actions to inform the community on inclusive education and the rights of persons with disabilities are promoted.

42.3 The articulation of different opportunities to identify children with disabilities who do not attend school is promoted.

42.4 Conditions for awareness and usage of all community resources in attending to the educational needs of all students are generated and promoted.

7. SIRIED classifications and definitions

In order to guarantee the reliability and, at a fundamental level, comparability between the data produced, the harmonisation of concepts, classifications, and definitions is a fundamental step in any effort to develop policy information systems[12].

The recommended usage of standard classifications, both in data acquisition and in the presentation of statistics and indicators, facilitates the linkage and comparison of data across the region, as well as linkage and comparability of data related to different subject areas or from different information sources.

SIRIED uses standard international classifications that are of general usage in the field of education, such as the 1997 International Standard Classification of Education (ISCED97) as well as other international classifications such as those relating to gender or to area of residence. The system also proposes a suite of customised classifications, drawn up following the careful consideration of the classifications and definitions currently in use in the countries; these classifications with further adjusted during the system validation process.

The following table presents a summary of the classifications used in the system, and the section below presents the operative definitions of these classifications.

7.1. Summary of classifications

Classification	Categories
Level of education	Level 0 - Pre-primary education: Level 1 - Primary education or the first cycle of basic education Level 2 - Lower secondary or second stage of basic education Level 3 – Upper secondary education Level 4 – Post secondary, non-tertiary education Level 5 – First cycle of tertiary education Level 6 - Second cycle of tertiary education
Education modality	a. Regular education b. Special education c. Education for young people and adults

Educational management	a. Public education establishment
	b. Private education establishment
	  i. Government subsidized education establishment (dependent)
	  ii. Non-subsidised private education establishment (independent)

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[12] The international level it is the task of the United Nations through its Statistics Division, specialized agencies such as UNESCO, and other organisations (OECD, World Bank, etc.) to draw up standards and guidelines for the production of international statistics and to develop standardised international classifications.

Location or zone	a. Urban b. Rural
Ethnicity	a. Indigenous peoples b. Groups of African descent c. Other peoples

Type of disability	a. Mobility disability
	b. Intellectual disability
	c. Sensory disabilities
	    i. Hearing
	    - Hearing impairment
	    - Deafness
	    ii. Visual
	    - Visual impairment
	    - Blindness
	    iii. Deaf-blindness
	d. Multiple disabilities or multiple challenges
	    - Other
	e. Generalised developmental disorders
	f. Other disability

Accessibility	a. Physical accessibility:
	    i. Suitable access routes
	    ii. Suitable/adapted bathrooms
	    iii. Interior adaptations to buildings
	b. Specific equipment, furniture, and materials:
	    i. Adapted furniture
	    ii. Adapted computers
	    iii. Specific software
	    iv. Adapted teaching materials
	    v. Other
	c. Communications codes
	    i. Sign language
	    ii. Braille
	    iii. Total communication code
	    iv. Bliss
	    v. Other

Support service organisation type	a. Support services based in regular schools b. Support services external to regular schools provided by special schools or special education c. Sector based on district based support services such as multidisciplinary teams are resource centres d. Other

7.2. Operative definitions

7.2.1. Education programs and levels. International Standard Classification of Education (ISCED97).

Decisions relating to the scope of the term "education" and the classification of SIRIED activities and programmes were made in line with the ISCED97 standards[13], which constitute an integrated and coherent framework for the acquisition of internationally comparable statistical data.

Under ISCED97, the term education includes all voluntary and systematic activities designed to meet learning needs. This includes what in some countries is referred to as cultural activities or training. Whatever the name given to it, education is understood to involve organized and sustained communication designed to bring about learning, and which is offered to children, young people, and adults, regardless of the institutional body that provides it all the way in which it is provided..[14]

The basic unit of classification and ISCED is the education programme, defined as an array or sequence of educational activities which are organized to accomplish a predetermined objective; that is, a specific set of educational tasks.[15]

Education programs can be classified by level. The concept of a level is related in general terms to the grading of learning experiences and to the competencies that the content of a particular education programme requires that its participants possess in order to be able to acquire the knowledge, skills, and capacities that the programme aims to impart[16].

Level 0- Pre-primary education: Programmes at ISCED level 0, (pre-primary) defined as the initial stage of organized instruction are designed primarily to introduce very young children to a school-type environment, i.e. to provide a bridge between the home and a school-based atmosphere. Upon completion of these programmes, children continue their education at ISCED level 1 (primary education). Preschool education is targeted at children of at least three years of age, and the maximum age depends in each case on the ordinary age of entry into primary education. This level includes organized education for children with special educational needs, which may also be imparted in hospitals, special schools, or training centres. In this case no maximum age limit is fixed.

Level 1- Primary education or the first cycle of basic education: Programmes at level 1 are normally designed on a unit or project basis to give students a sound basic education in reading, writing and mathematics along with an elementary understanding of other subjects such

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[13] UNESCO. International Standard Classification of Education (ISCED97). http://www.uis.unesco.org/Library/Documents/isced97-en.pdf

[14] UNESCO. International Standard Classification of Education (ISCED97). http://www.uis.unesco.org/Library/Documents/isced97-en.pdf

[15] The limitations of a programme-based taxonomy must be underscored, as such a system ignores information on the trajectories of participants through the education system, and this presents only a limited view of the system's functionality in the real world

[16] In view of the difficulty of making direct international assessments and comparisons regarding programme content, ISCED adopts a number of criteria to aid in the classification of a given programme into the appropriate level of education. Depending on the level and type of education, a hierarchy of criteria must be established: principal criteria and subsidiary criteria (minimum entry requirements, minimum entry qualifications, minimum age, qualifications of personnel, etc.)

as history, geography, natural science, social science, art and music. The core at this level consists of education provided for children, the customary or legal age of entrance being not younger than five years or older than seven years.

The levels generally consists of 5 to 7 years of full-time schooling. It includes programmes targeted towards children with special educational needs and literacy programs conducted both inside and outside of schools with contents similar to those of primary education, and which are aimed towards persons who are too old to enter primary school. In countries in which primary teaching forms part of "basic education", only the first cycle is included in this level; and if such education is not organised into levels, the first six years are included.

Level 2- First cycle of secondary education or second cycle of basic education: The contents of education at this stage are typically designed to complete the provision of basic education which began at ISCED level 1. In many, if not most countries, the educational aim is to lay the foundation for lifelong learning and human development on which countries may expand, systematically, further educational opportunities. The full implementation of basic skills occurs at this level. The end of this level often coincides with the end of compulsory education where it exists.

The programmes at this level are usually on a more subject-oriented pattern using more specialized teachers and more often several teachers conducting classes in their field of specialization. When no transition between levels exists to signal this organisational change, national programs must be artificially subdivided such that after the first six years of primary education students are considered to pass from level one to level two. In countries where no division is made between the first and second cycles of secondary education, or where the first cycle lasts for more than three years, this level is taken to include only the first three years of the first cycle of secondary education.

This level includes special education and adult education programs.

Level 3- Secondary education: The educational programmes included at this level typically require the completion of some 9 years of full-time education (since the beginning of level 1) for admission or a combination of education and vocational or technical experience and with as minimum entrance requirements the completion of level 2 or demonstrable ability to handle programmes at this level. In most countries this is the final phase of secondary education. More specialization may be observed at this level than at ISCED level 2 and often teachers need to be more qualified or specialized than for ISCED level 2. The entrance age to this level is typically 15 or 16 years

Level 4 - Post-secondary non-tertiary education: This level captures programmes that straddle the boundary between upper-secondary and post-secondary education from an international point of view, even though they might clearly be considered as upper-secondary or post-secondary programmes in a national context. Typical examples are programmes designed to prepare students for studies at level 5 who, although having completed ISCED level 3, did not follow a curriculum which would allow entry to level 5, i.e. pre-degree foundation courses or short vocational programmes.

Level 5 - First cycle of tertiary education: This level consists of tertiary programmes having an educational content more advanced than those offered at levels 3 and 4. Entry to these programmes normally requires the successful completion of ISCED level 3A or 3B or a simi-

lar qualification at ISCED level 4A. These programmes must have a cumulative theoretical duration of at least 2 years from the beginning of level 5.

Level 6 - Second cycle of tertiary education: This level is reserved for tertiary programmes which lead to the award of an advanced research qualification. The programmes are therefore devoted to advanced study and original research and are not based on course-work only. It typically requires the submission of a thesis or dissertation of publishable quality which is the product of original research and represents a significant contribution to knowledge.

7.2.2. Education modality

The level of educations defined above refer to regular education, also known as standard education or ordinary education, as well as other types or modalities of education that seek to address specific segments of the population such as young people and adults, or persons with special educational needs. For the purposes of this system, education modality is classified into the following categories:

a. Regular education: ISCED does not contain a definition of regular education. The closest concept would be formal education, which is education imparted in the context of schools, faculties, universities, and other institutions for formal education that constitute a "ladder" of full-time education for children and young people, which generally starts between the ages of five and seven, and continues to the age of 20 to 25. In a Latin America "regular education" refers to schools that are not special education centres.

b. Special education: this term refers to education provided to persons with disabilities in special schools and in special sections of regular schools. Special schools are educational establishments dedicated to attending to children and young people with disabilities. Special classes in regular schools are groups made up of students with disabilities – who may or may not be in the same grade or year of education – in the same space, at the same time, and with the same teacher or team of teachers. Such classes are generally based on the philosophy of special schools, but within a regular establishment.

c. Education for young people and adults: The entire body of organized educational processes, whatever the content, level and method, whether formal or otherwise, whether they prolong or replace initial education in schools, colleges and universities as well as in apprenticeship, whereby persons regarded as adults by the society to which they belong, improve their technical or professional qualifications, further develop their abilities, enrich their knowledge with the purpose: to complete a level of formal education; to acquire knowledge and skills in a new field; to refresh or update their knowledge in a particular field (UIS, 1997).

7.2.3. Education management

The educational institution is the organization that provides educational services. It must normally be accredited or sanctioned by some public authorities. Most education institutions fall under the jurisdiction of, or are operated by, education authorities, but they may also be operated

83

by other public agencies dealing with such areas as health, training, labour, and justice, defence, as social services, etc[17]. Educational institutions are classified as:

    a) *Public educational institution:* controlled and managed by a public education authority for agency (national/federal, State/provincial, or local) whatever the origin of its financial resources (UIS, 2009).

    b) *Private educational institution:* controlled and managed by a nongovernmental organisation (church, trade union, or business enterprise) which may or may not receive the help of public authorities (UIS, 2009).

        i. *Government-subsidised private educational institution:* private establishments that receive at least 50% of their financing from government agencies. Establishments may also be classified as government subsidised private educational institutions if their personnel are paid directly or indirectly by government agencies (UIS, 2009).

        ii. *Non-subsidized private educational institution:* private establishments that are not financially dependent on a public body as less than 50% of their budget is derived from public sources or they receive no government funding (UIS, 2009).

7.2.4. Geographical location or area

It must be pointed out that no standardised international definition currently exists for the terms "urban" and "rural". Countries use different terminology and their own official definitions, with a wide variety of criteria standing in the way of comparability. Many countries make use of a quantitative criterion of 1000, 2000, or 2500 inhabitants as the dividing line between urban areas and rural settlements. Other countries additionally make use of criteria related to economic activity or the availability of certain services (street lighting, paved streets, sewerage, medical clinics, education centres, etc.) or use administrative criteria (municipal and administrative government systems).

In light of this diversity, the indicators are to be presented alongside a specification of the criteria for the definition of urban and rural areas for each country.

7.2.5. Ethnicity

    a) *Indigenous peoples:* it is important to point out that there is no universal definition for indigenous peoples (*Report of the. International Expert Group Meeting on Urban Indigenous Peoples and Migration* Santiago de Chile, 27-29 March 2007). In view of the variability of definitions and criteria used in identifying indigenous peoples in the countries of the region (self recognition, indigenous language, territorial systems, etc), the indicators but used within the framework of the system will be accompanied with the definitions of criteria in use in each country. *The Indigenous and Tribal Peoples Convention*, 1989 (ILO, 1989) defines indigenous peoples as peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonisation or the establishment of present state

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[17]   UIS (2009) Survey 2009. Data collection and education statistics. UIS/E/2009M.Montreal, October 2008

boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions. Self-identification as indigenous or tribal shall be regarded as a fundamental criterion for determining the groups to which the provisions of this Convention apply.

b) *Groups of African origin:* groups of African origin are the descendants of the African Diaspora that resulted from the slave trade that took place in the region between the 14th and 19th centuries (ECLAC, *Recomendaciones para los censos de 2010 sobre cartografía censal, migraciones, enfoque étnico y cobertura censal*). As in the case of indigenous peoples, a wide range of criteria are used in the identification of these groups. Brazil and Cuba, which have been producing statistics on such groups for some time, apply the criterion of race or skin colour.

c) *Other peoples:* this category contains the difference between the total (total enrolment, or total enrolment of persons with disabilities) and the two categories defined above. It includes all persons who do not belong to indigenous groups or groups of African descent.

7.2.6. Personal condition: type of disability

Classification systems have imposed the categorisation – and hence labelling – of people. Many aspects of the way in which classifications have been used have had pernicious effects because, influenced by highly deterministic scientific concepts, they have led to the idea that a person is unable to transcend certain fixed limits of behaviour or learning. Nonetheless, classifications **are necessary** in order to order and categorise the vast number of elements and situations that make up the area of life that we aim to explain and understand.

In this information system, classification by type or condition of disability is to be used solely in order to determine to what extent the right to education is being realized for this group, and what types of disability are most excluded or subjected to inequality. Conversely, the classification of types of disability does not stem from educational principles but rather from the area of health. In education, the key objective is to understand students' needs, in terms of support and resources, in order to participate and learn; and as shown above, this depends not only on their type of disability but also on a wide range of factors inherent in individuals and in the contexts in which they develop and learn, such as political, human, and institutional barriers.

The classification by types of disability adopted in the system does not coincide fully with that used in the countries of the region, and indeed variability exists between countries. It should be noted that the terms 'disability' and 'impairment' are often used as synonyms in these countries. Impairment is a condition of the individual, while disability, as shown above, is the result of the interaction between the impairment of individuals and the barriers of their surroundings. Therefore, within this paradigm any attempt to quantify the number of persons with disabilities must do so based on their personal impairment conditions (sensory, motor, etc), but the decision has been made to adopt the term disability because of its use in countries' laws and policies, and as the generic term used in the Convention on the Rights of Persons with Disabilities.

Definitions adopted regarding the different types of disability are very general, such that each country may compare its own definitions with those proposed for the system and locate students with each category of disability in order to ensure comparability. We are aware of the complexity

of this task and of the great variability of criteria that are used in diagnosing persons with disabilities in different countries. In any case, the identification of the type of disability should not become a label that is used in discrimination against students or to lower expectations with regard to their potential, but should rather be used only as a small part of the information necessary in order to guide decision-making with regard to resources and support that must be guaranteed by education authorities in order for all students to enjoy equal conditions to take advantage of education opportunities.

Before continuing to the definitions, two significant aspects must be underscored: the lack of international standard definitions and the great variability of definitions used in countries and wide range of situations included in the category of each disability. Persons with a particular disability do not form a homogenised group; not only do a wide variety of factors exist related to the disability itself (level, time of appearance, aetiology, etc.), but a range of other factors related to the educational, family, and social environment may exert different effects on the possibilities for development, learning, and participation in different life activities.

a) *Motor disability:* permanent limitations in the neuromuscular system (posture, mobility, movement coordination, oral expression) arising from a functional impairment in the musculoskeletal or nervous system, leading to very variable levels of limitation on functional capacity. The most common such conditions are cerebral paralysis, spina bifida, and muscular dystrophies. The elimination of physical barriers and the provision of technical assistance, equipment, and alternative or augmented communication systems are crucial in facilitating the autonomy, mobility, communication, and learning of students with motor disabilities.

b) *Intellectual disability*[18]*:* originates before the age of 18 and is characterized by characterized by significant limitations both in *intellectual functioning* and in *adaptive behaviour.*

  • Intellectual functioning: refers to general mental capacity, such as learning, reasoning, problem solving, and so on.

  • Adaptive behaviour: comprises three skill types:

   - Conceptual skills—language and literacy; money, time, and number concepts; and self-direction.

   - Social skills—interpersonal skills, social responsibility, self-esteem, gullibility, naïveté (i.e., wariness), social problem solving, and the ability to follow rules/obey laws and to avoid being victimized.

   - Practical skills—activities of daily living (personal care), occupational skills, healthcare, travel/transportation, schedules/routines, safety, use of money, use of the telephone.

c) *Sensory disabilities*

  i. *Hearing disability:* this is a general term that refers to different levels of impairment in hearing function, which has implications in communicational and social development and in the learning of written language. Although different classifications

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[18]   *American Association on Intellectual and Developmental Disabilities* (*AAIDD*) at http://www.aamr.org

exist with regard to levels of hearing loss, the localisation of the syndrome, and the time of onset, two sub categories are usually established; **deafness**, which implies total or very severe hearing loss; and **hearing impairment**, which implies partial loss varying from mild to severe, but with the retention of some functional hearing.

From a socio-cultural perspective deaf persons constitute a community that shares a language and a code of conduct and values, which are learned and transmitted from one generation to the next. Bilingual education must be developed for deaf persons; sign language as a first language and the learning of spoken and written language. This requires human and material resources permitting the learning of sign language and the use of technical aids and complementary or augmentative systems that facilitate the learning of spoken language.

ii. *Visual disability[19]:* limitation of visual function characterised by a wide range of levels of vision, with congenital or acquired causes. Two major categories are usually established: **blindness**, as total loss of vision or slight perception of light; and visual impairment, in which sufficient visual function remains to allow light to be seen and used for orientation and other functional purposes.

Visual impairment usually has implications in information access, orientation, and mobility, and therefore aids and supports must be guided by the learning in the Braille System, visual stimulation and mobility, providing persons with visual disability with the information equipment and tools that facilitate these processes.

d) *Multiple disabilities or multiple challenges:* when a person is affected by more than one type of disability. Adequate attention for students with multiple disabilities requires generalised and extensive support in the areas of communication, orientation, mobility, daily life, socialization, and learning in general. This category can include a wide variety of situations, but for the purposes of this information system only blind-deafness has been given an explicit a category, because it is often included in national classifications. Blind-deafness is a dual sensory disability, involving significant impairment in both vision and hearing, with consequent extreme effects on other aspects of development, in a different way to the alteration that can be caused by loss of vision or of hearing separately. Other situations of multiple disabilities are registered under the classification "other".

e) *Generalised developmental disorders[20]:* these are characterised by qualitative alterations in reciprocal social interaction, verbal and non verbal communication, and by a repetitive, stereotyped, and restrictive repertory of interests and activities. These difficulties, although variable in severity, are a generalised characteristic of the behaviour of the individual in all situations. They appear during early childhood, and in exceptional cases after the age of five. This category includes childhood autism, atypical autism, Rett syndrome, and Asberger syndrome. It is of particular importance to offer these persons a wide range of opportunities to facilitate the development of social and communicational skills, in organized, structured, and predictable learning environments, with explicit and sequential teaching.

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[19] ONCE: http://www.once.es/home.cfm?id=189&nivel=3&orden=7
[20] WHO, 10th edition of the international classification of diseases (ICD 10) , Chapter V "Mental and behavioural disorders"

f) Other types of disability (specify): this category is included so as to allow countries to incorporate available information not contained in the categories defined, or that fails to fit exactly into one category. The specification requested for all information reported in this category will permit an exhaustive analysis and the consideration of such information inasmuch as it applies to the system's target group.

> *This category should not include as disabilities* so-called learning difficulties (reading, writing, mathematics), problems of adaptation or conduct (hyperactivity, attention deficit), or difficulties in spoken language (articulation, fluency) even though these problems may be addressed by special education.

7.2.7. Accessibility

a) Physical accessibility: including the following aspects:

  i. *Suitable access routes:* such as ramps with safety rails and staircases with handrails. It is useful for staircases and ramps to be combined so as to increase the number of persons who benefit from universal design. Ramps may be permanent or mobile, when a fixed ramp cannot be installed, so long as safety requirements are met. Elevators and special elevation equipment constitute essential elements in allowing all persons to reach locations at different levels of a building.

  ii. *Suitable/adapted bathrooms:* the entry door must permit the access of persons in wheelchairs and the floor covering must be non slip. Bathroom fittings must be adapted to facilitate movement between the toilet and a wheelchair, and must include safety bars. Taps, hand dryers, and light switches must be designed and installed for easy usage by all persons.

  iii. *Interior adaptations to buildings:* doorways and corridors must be of sufficient size to allow free access and transit, taking particular account of wheelchair users. Doors must be easy to open. Information on the locations of certain places, warnings of specific dangers or safety rules, and other such signage, must be provided in visual, acoustic, and tactile form so as to be accessible for all persons.

b) Specific equipment, furniture, and materials:

  i. *Adapted furniture[21]:* although modifications and adaptations are of a highly personalised nature, there must be guided by the following criteria: facilitation of balance, provision of a comfortable posture, safety, avoidance of incorrect posture, support for the feet, facilitation of better control over school materials, facilitation of personal interaction.

  ii. *Adapted computers:* a wide variety of adaptations made the necessary depending on the type of disability. Hardware adaptations include: modification of the keyboard, buttons, and switches; voice synthesisers; keyboard emulators; conceptual keyboard; mouse emulator.

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[21] Malaga Motor Disorder Advisory Team Mobiliario escolar específico para alumnado con discapacidad motora – Paper presented at Congreso Educar in Malaga "La ciudad Educadora" Torremolinos, 9 to 12 May, 2002.

iii. *Specific software:* a wide variety of software exists for different disabilities, including the following examples:

- Motor disability: Plaphoons (symbolic communication system); syllabic keyboard; IRdata 2000 (permits computer control through head movements)

- Hearing disability: Globus (phonetic visualisation); Speech Viewer III – IBM (transforms spoken sounds or words into graphics); Tcomunica (for persons with cerebral paralysis. As the voice cannot be used, learning is accomplished through the use of symbols and colours).

- Visual disability: ZoomText Xtra 7.1. (for persons with visual impairment, increases the size of Windows programs and synthesises speech); Open Book: Ruby Edition 4.0 (permits voice access to the Internet) JAWS for Windows 3.7 (screen reader)

iv. *Adapted teaching materials;* 3D maps, books or stories in Braille or sign language, audio books, etc.

v. *Other* (specify)

c) *Communications codes:* these are classified as follows

i. *Sign language[22]:* gestures articulated with the hands and accompanied with facial expressions, eye movements, and body movements, for communication.

ii. *Braille[23]:* a system that permits blind persons to read and write by touch. It replaces a normal letters with tactile symbols. Braille can be written using a stylus or a Braille typewriter.

iii. *Total Communication code[24]:* the Signed Speech Total Communication Programme created by Benson Shaeffer embraces two other terms: Signed Speech and Simultaneous Communication. Signed Speech is the production of oral speech and signs at the same time. This offers the most complete language system possible, allowing a person to associate certain elements of meaning in two different ways, oral and signed, facilitating communication when speech is impaired as a communications channel.

iv. *Bliss[25]:* this is a graphical-visual system based on pictorial symbols. Symbols are grouped into categories which are identified with colours: nouns (orange), persons (yellow), verbs (green). The meaning of each symbol is defined by its configuration, size, position, and the distance between elements, numbers, punctuation marks, and other features. Bliss-based computer systems have been developed and are used by persons with cerebral paralysis, intellectual disability, aphasia, and hearing disability.

v. *Other (specify)*

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[22] Real Patronato sobre Discapacidad, Ministry of Labour and Social Affairs, Spain. Cited in the glossary of the website of the Servicio Nacional de la Discapacidad (SENADIS), Government of Chile http://www.fonadis.cl/glosario
[23] Source: http://www.fundacionluz.cl/sistema_braille.htm
[24] Source: www.esaac.org/index.php?option=com_content&task=view&id=58&Itemid=45
[25] Source: http://www.espaciologopedico.com/articulos2.php?Id_articulo=138

7.2.8. Support service organisation type

Support systems that can be developed within schools (by students, teachers, and families) must be complemented with support systems beyond the school in order to attend to the diversity of students' needs. The organization of support services can vary depending on the professionals involved, the functions undertaken, whether they are external or school based, and whether they are fixed or mobile. The most common support organisation and service provider types are:

a) *Support services based in regular schools.* These are professionals with fixed employment in the centres as special education teachers, sign language interpreters, guidance personnel, psychologists. They are often organized into resource classrooms in which the different professionals provide support to teachers and families, and when necessary to students.

b) *Support services external to regular schools, provided by special schools or special education.* In some countries the services of special schools are extended to regular schools and to the community. This means that certain professionals from the special school are dedicated part time or full time to this task, providing support in regular schools, or when students and their families attend the special school in order to receive support outside of normal school hours. In other cases, services or teams that are part of special education exist outside of special schools and provide support to regular schools.

c) *Sector or district support services such as multidisciplinary teams or resource centres.* This category may refer to multidisciplinary or teaching psychology teams that provide mobile services to a particular sector or a set of schools, or to community resource centres. In the case of support centres, it is the students, families, and teachers who travel to the centre, and such centres are particularly significant in their functions supporting the professional development of teachers. These support systems are used to assess students, to advise and train teachers, to build community awareness, to train families, to create materials, and to provide information on services and materials available, as well as their role in direct teaching.

d) *Other* (specify).

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