



Background and introduction

Background and introduction to the training modules

Within the framework of 'Enhancing Statistical Capacities for Education – Towards Strengthening SDG (Sustainable Development Goal) 4 Monitoring in Asia and the Pacific' and as a part of the Regional Monitoring Mechanism, this training manual on monitoring SDG 4-Education 2030 has been developed for countries in Asia and the Asia-Pacific to fortify their statistical and data management capacities for monitoring Sustainable Development Goal 4.

This manual covers various topics that are relevant to building an effective monitoring system, such as the creation of a national indicator framework and the development of national strategies for education statistics; strengthening the administrative data production system; and increasing the household survey application in monitoring education at the national level, as well as reporting at the global level.

The manual is comprized of six modules and these are outlined in this introductory module. The purpose of this module is to introduce the SDG 4–Education 2030 Agenda to help prepare learners on the components of the SDG 4–Education 2030 Agenda.

1 Background

1.1 Education development in the new millennium

The 2015 Incheon Declaration for Education 2030 envisions a humanistic vision of education and development based on human rights and dignity; social justice; inclusion; protection; cultural, linguistic and ethnic diversity; and shared responsibility and accountability¹. It reaffirms that education is a public good, a fundamental human right and a basis for guaranteeing the realization of other rights. It is essential for peace, tolerance, human fulfilment and sustainable development. It recognizes education as a means to achieving full employment and poverty eradication. Its efforts focus on access, equity and inclusion, quality and learning outcomes, within a lifelong learning approach. This new vision of the Incheon Declaration looks at education development as a sustainable process and it has secured international and national commitments to work for the achievement of the Education Goal of SDG 4, expressed in terms of its ten targets with three means of implementation, which seek:

“To ensure inclusive and equitable, quality education and promote lifelong learning opportunities for all.”

The Incheon Declaration 2015 was adopted after taking stock of progress made towards the achievement

Box 1: The Incheon Declaration 2015



UNESCO, together with UNICEF, the World Bank, UNFPA, UNDP, UN Women and UNCHR organized the World Education Forum 2015 in Incheon from 19 to 22 May, which was hosted by the Republic of Korea. Over 1,600 participants from 160 countries, including over 120 ministers, heads and members of delegations, heads of agencies and officials of multilateral and bilateral organizations and representatives of civil society, the teaching profession, youth and the private sector, adopted the Incheon Declaration for Education 2030, which sets out a new vision for education for the next fifteen years.

¹ Education 2030 Steering Committee, 2016: Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4. Access: http://uis.unesco.org/sites/default/files/documents/education-2030-incheon-framework-for-action-implementation-of-sdg4-2016-en_2.pdf

of the Education for All (EFA) goals since 2000 and the education-related Millennium Development Goals (MDGs). The process included a review of the lessons learned; an examination of the remaining challenges and deliberation on the proposed Education 2030 Agenda; the Framework for Action; and future priorities and strategies for its achievement.

Table 1 below compares global education agendas since 2000.

Table 1: Comparison of Global Education Agendas

Global Education Agenda Aspect of Comparison	Millennium Development Goal 2	Education For All	Sustainable Development Goal 4
Scope	Primary Education (children)	Basic Education (children, youths and adults)	Basic Education + Post-basic education and lifelong learning
Coverage	Low-income countries; conflict-affected nations	Universal in intention; focus on lower-income countries	Universal agenda Global North and South
Process led by:	United Nations	United Nations	Member States
Policy Focus	Access to and completion of primary education for all	Access to quality basic education for all	Access to quality basic education for all + equitable access to post-basic education + relevance of learning for work and citizenship
No. of targets	2	6	10

Source: Adaptation from a presentation by S. Tawil, UNESCO, as reported in NEQMAP's 4th Annual Meeting, December 2016, Bangkok in "Regional Issues/Challenges in the implementation and monitoring of SDG 4-Education 2030 Agenda".

1.2 The 2030 Agenda for Sustainable Development

The 2030 Agenda for Sustainable Development was adopted by world leaders at the United Nations Sustainable Development Summit in September 2015. It comprises 17 SDGs. It encompasses the three core dimensions of economic, social and environmental development and offers countries a unique pathway to eradicate poverty and hunger

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and to provide a life of dignity for all, while at the same time paying attention to environmental sustainability.

Besides addressing the issues of poverty and hunger, the SDGs address other important issues relating to health, education, gender equality, water and sanitation, sustainable energy, economic growth, industrialization, reduction of inequalities, safe human settlements, sustainable consumption and production patterns, climate change, use of marine resources, ecosystems and biodiversity, justice for all and revitalization of global partnerships for sustainable development.

Of universal concern in sustainable development are the three pillars of the economic, the social and the environmental. This concern implies setting a universal agenda for development based on a:

- Universality of principles (human rights);
- Universality of reach (focus on equity and inclusion);
- Universality of country coverage.

Figure 1: The Sustainable Development Goals



For more on the World Development Agenda and the Sustainable Development Goals, **access:** <https://sustainabledevelopment.un.org/sdgs>

Figure 2: The 5Ps

Source: Adapted from Vladimirova, K. and David Le Blanc, 2015: How well are the links between education and other sustainable development goals covered in UN flagship reports? A contribution to the study of the science-policy interface on education in the UN system. Working Paper No. 146 ST/ESA/2015/DWP/146. New York, United Nations, DESA., [access: www.un.org/esa/desa/papers/2015/wp146_2015.pdf](http://www.un.org/esa/desa/papers/2015/wp146_2015.pdf)

The 5Ps

The world development Agenda 2030 and its SDGs sets a universal agenda for all countries, with five objectives also called the '5Ps', namely:

1. People: to end poverty and hunger.
2. Planet: to protect it from degradation.
3. Prosperity: to ensure that all human beings can enjoy prosperous and fulfilling lives.
4. Peace: to foster peaceful, just and inclusive societies.
5. Partnership: to mobilize the means required to implement this agenda through a revitalized global partnership for sustainable development.

Rationale of Education 2030

The rationale for the SDG 4-Education 2030 Agenda arises out of the historical developments on education development witnessed globally ever since the advent of EFA and the MDGs. There is no doubt about the achievements registered by EFA and MDGs, particularly in the global context. However, the importance of SDG 4 lies in the fact that it is:

- More comprehensive: provides for expanded access to all levels of education, with at least 12 years of free, publicly funded, quality primary and secondary education, higher education, Technical and Vocational Education and Training (TVET) and life-long education.
- More outcome/skills oriented, with:
 - Renewed focus on effective acquisition of foundational skills.
 - New focus on relevance of learning for securing decent work.
 - New focus on relevance of learning for social and civic life.
- Better integrated with other goals.

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With SDG 4, education is mandated to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.” The goal’s targets are presented below with some brief statements on the main policy commitments, as derived from the Framework for Action².

Table 2: SDG 4-Education 2030 Targets and Policy Commitments for Actions/Outcomes

TARGETS	POLICY COMMITMENTS FOR ACTIONS/OUTCOMES
4.1. By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education, leading to relevant and effective learning outcomes.	Ensure the provision of 12 years of free, publicly-funded inclusive, equitable, quality primary and secondary education – of which at least nine years ³ are compulsory, leading to relevant learning outcomes.
4.2. By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so they are ready for primary education.	Ensure the provision of at least one year of free and compulsory quality pre-primary education, as well as that of early childhood development and care.
4.3. By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university education.	Reduce barriers to skills development and TVET, starting from the secondary level, as well as to tertiary education, including university education and provide lifelong learning opportunities for youth and adults.
4.4. By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.	Ensure equitable access to TVET and other learning opportunities using a wide range of education and training modalities, for youth and adults to acquire relevant knowledge, skills and competencies for decent work and life. Beyond work-specific skills, emphasis must be placed on developing high-level cognitive and non-cognitive/transferable skills.
4.5. By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous people and children in vulnerable situations.	Ensure all people, irrespective of sex, age, race, colour, ethnicity, language, religion, political or other opinion etc., have access to an inclusive, equitable, quality education and lifelong learning opportunities. Ensure all girls and boys, women and men have equal opportunity to enjoy an education of a high quality, to achieve at equal levels and enjoy equal benefits from education.

² The Education 2030 Framework for Action provides guidance for the implementation of SDG 4 at country, regional and global levels. For more details, access UNESCO, 2017: Unpacking Sustainable Development Goal 4 Education 2030, at: <https://unesdoc.unesco.org/ark:/48223/pf0000246300>

³ The first nine years of formal education, i.e., the cumulative duration of ISCED 1 and 2: ISCED 1 is the primary level, typically lasting six years (with variation across countries between four and seven years), and ISCED 2 is lower secondary, typically lasting three years (again, with variation). For more, see: UIS, 2012: International Standard Classification of Education 2011, UIS, Montreal, access: <http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf>

<p>4.6. By 2030, ensure that all youth and a substantial proportion of adults, both women and men, achieve literacy and numeracy.</p>	<p>Action for this target aims to ensure that by 2030, all young people and adults across the world have achieved relevant and recognized proficiency levels in functional literacy and numeracy skills that are equivalent to levels achieved at successful completion of basic education.</p>
<p>4.7. By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and culture's contribution to sustainable development.</p>	<p>The content of such education must be relevant, with a focus on both cognitive and non-cognitive aspects of learning. The knowledge, skills, values and attitudes required by citizens to lead productive lives, make informed decisions and assume active roles locally and globally in facing and resolving global challenges can be acquired through education for sustainable development (ESD) and global citizenship education (GCED), which includes peace and human rights education, as well as inter-cultural education and education for international understanding.</p>
<p>MEANS OF IMPLEMENTATION</p>	
<p>4.a. Build and upgrade education facilities that are child, disability and gender-sensitive and provide safe, non-violent, inclusive and effective learning environments for all.</p>	<p>This target addresses the need for adequate physical infrastructure and safe, inclusive environments that nurture learning for all, regardless of background or disability status.</p>
<p>4.b. By 2020, substantially expand globally the number of scholarships available to developing countries, in particular, least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries.</p>	<p>In line with SDG 4-Education 2030, a focus on equity, inclusion and quality, scholarships should be transparently targeted at young people from disadvantaged backgrounds.</p>
<p>4.c. By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.</p>	<p>As teachers are a fundamental condition for guaranteeing a quality education, teachers and educators should be empowered, adequately recruited and remunerated, motivated, professionally qualified and supported with well-resourced, efficient and effectively governed systems.</p>

Source: Adapted from UNESCO, 2017: Unpacking Sustainable Development Goal 4 Education 2030, **access:** <https://unesdoc.unesco.org/ark:/48223/pf0000246300>

1.3 The Interconnectedness of SDG 4 with other goals of the Agenda 2030

The SDGs were designed with interconnectedness in mind and education can be a central goal in achieving this. When we look at the themes of other SDGs, we understand that successful achievement requires a sense of undergirding education to make informed decisions.

Let's take SDG 8 on decent work and economic growth as an example. Education impacts on a worker's capabilities and in return their productivity for the national economy. This in turn impacts on international market participation.

Education also influences what labour choices women have as education influences their decision-making capacity and informs them about the options that exist in the world of work – subsequently contributing to gender equality and women's empowerment (SDG 5).

Similarly, we can approach SDG 12 on responsible production and consumption. In order to move towards a humanity that treats natural resources with care, a paradigm shift in today's consumption and production patterns has to happen in all parts of the world.

Education is used to establish a national identity; but education serves a much greater purpose to influence citizen's behaviour and lifestyle choices (from children, to adults, to employers, to policy-makers) for less wasteful indulgencies and instead towards a resource-conscious humanity.

Education influences habits, behaviour and choices that result in a higher awareness of issues. Taking into consideration SDG 13 on taking urgent action to combat climate change – how can we expect citizens of the earth to do the right thing when we do not educate them about it?

And then there is SDG 16 on *peace, justice and strong institutions*. To ensure peaceful, just and equal societies, citizens need to learn what is unjust, unfair, or the suffering in the absence of peace. Education serves us to advance people's capacity to make humane choices with consideration for diversity and free expression, without the need for violence and oppression, or any other form of cruelty.

To name some precise Target linkages; Target 4.2 on early childhood education intersects with SDG 16 and Target 16.1 on ending abuse, exploitation, trafficking and all forms of violence against and torture of children.

Target 4.3 on TVET intersects with SDG 8, Target 8.5, which states the aim of full and productive employment and decent work for all women and men by 2030, including for young people and persons with disabilities, plus equal pay for work of equal value.

Target 4.7 on ensuring that all learners acquire the knowledge and skills needed to promote sustainable development intersects with SDG 1, Target 1.5 which states that by 2030, the resilience of the poor and those in vulnerable situations and their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters has to be fortified.

The following table depicts the interconnectedness of the SDGs as they are linked to the Targets of SDG 4.

Table 3: The SDGs intersecting with SDG 4 Targets

Agenda 2030 - Sustainable Development Goals																		
	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	
SDG 4	Target 4.1	●		-	●			●			●							
	Target 4.2	●	●	●	-	●		●			●					●		
	Target 4.3				-	●		●										
	Target 4.4				-	●		●										
	Target 4.5				-	●	●	●		●								
	Target 4.6				-	●												
	Target 4.7	●		●	-	●		●		●	●	●	●				●	
	Target 4.a	●			-	●	●		●	●		●					●	
	Target 4.b	●			-	●			●		●							●
	Target 4.c				-	●			●		●	●						

Source: Adapted from Vladimirova, K. and David Le Blanc, 2015: How well are the links between education and other sustainable development goals covered in UN flagship reports? A contribution to the study of the science-policy interface on education in the UN system. Working Paper No. 146 ST/ESA/2015/DWP/146. New York, United Nations, DESA, **access:** www.un.org/esa/desa/papers/2015/wp146_2015.pdf

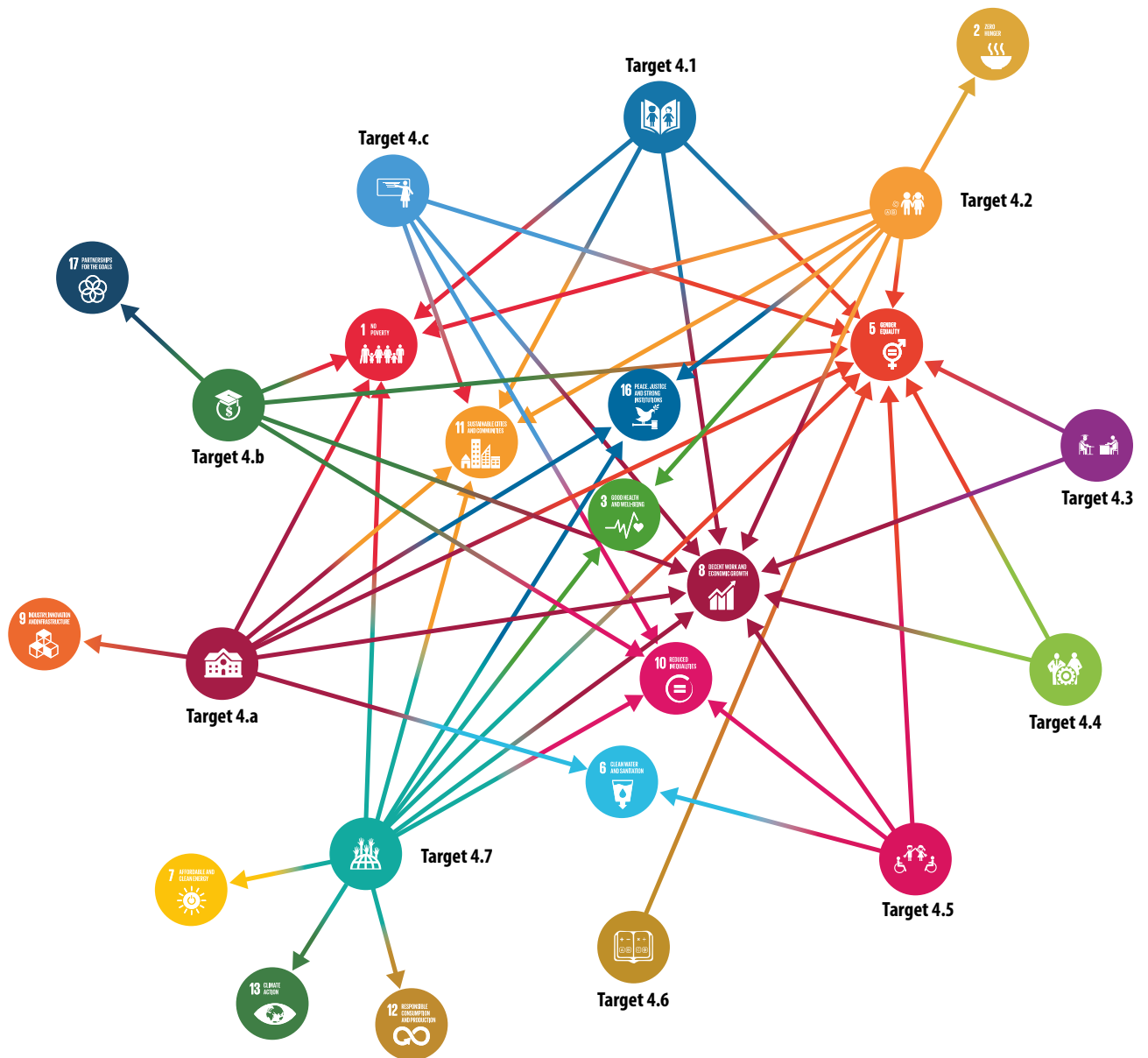
Figure 3 visualizes the interconnectedness of the SDG 4 targets with other SDGs and reveals a complex map.

To achieve the education target and the SDGs in general, as well as their monitoring, there are many areas and concepts to deal with and as part of this process, partnerships and collaboration are an important necessity.

Countries' line ministries need to work closely with local institutions. Civil society organizations, in particular, can play a very important role by bringing valuable cases to the forefront and casting light on critical issues that need to be addressed.




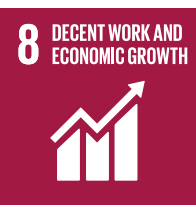



To provide further exploration of the importance of 'interconnectedness', the following overview makes reference to education in other Agenda 2030 goals.

Figure 3: SDGs are connected: Centrality of Education



Source: Adapted from Vladimirova, K. and David Le Blanc, 2015: How well are the links between education and other sustainable development goals covered in UN flagship reports? A contribution to the study of the science-policy interface on education in the UN system. Working Paper No. 146 ST/ESA/2015/DWP/146. New York, United Nations, DESA., **access:** www.un.org/esa/desa/papers/2015/wp146_2015.pdf

Figure 4: Education related targets and indicators in other SDGs

 <p>1 NO POVERTY</p>	<p>SDG 1: End poverty in all its forms everywhere</p>	<p>Target 1.a Ensure significant mobilisation of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least-developed countries, to implement programmes and policies to end poverty in all its dimensions.</p>	<p>Indicator: Proportion of total government spending on essential services (education, health and social protection).</p>
 <p>3 GOOD HEALTH AND WELL-BEING</p>	<p>SDG 3: Health and well-being</p>	<p>Target 3.7 By 2030, ensure universal access to sexual and reproductive health care services, including for family planning, information and education and the integration of reproductive health into national strategies and programmes.</p>	<p>Indicator: Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods.</p> <p>Indicator: Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group.</p>
 <p>5 GENDER EQUALITY</p>	<p>SDG 5: Gender equality</p>	<p>Target 5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the ICPD and the Beijing Platform for Action and the outcome documents of their review conferences.</p>	<p>Indicator: Number of countries with laws and regulations that guarantee women aged 15-49 years have access to sexual and reproductive health care, information and education.</p>
 <p>8 DECENT WORK AND ECONOMIC GROWTH</p>	<p>SDG 8: Decent work and economic growth</p>	<p>Target 8.6 By 2020 substantially reduce the proportion of youth not in employment, education or training.</p>	<p>Indicator: Proportion of youth (aged 15-24 years) not in education, employment or training.</p>
 <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>SDG 12: Responsible consumption and production</p>	<p>Target 12.8 By 2030 ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.</p>	<p>Indicator: Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment.</p>
 <p>13 CLIMATE ACTION</p>	<p>SDG 13: Climate change</p>	<p>Target 13.3 Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.</p>	<p>Indicator: Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula</p>
 <p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<p>SDG 16: Peace, justice and strong institutions</p>	<p>Target 16.6 Develop effective, accountable and transparent institutions at all levels.</p>	<p>Indicator: Primary government expenditures as a proportion of original approved budget by sector (or by budget codes or similar).</p>

2 Monitoring SDG 4

Such a universal vision places new demands on countries, especially on the producers and users of education data.

A corresponding responsibility falls on the shoulders of policy makers, planners, as well as programme implementers at the country level, as users of such data.

If the data quality is good and its reliability of a high order, this will greatly facilitate their collective task. The decision makers at the country level need to be properly sensitized on the need to allocate adequate resources to education in such a way that it helps strengthen the overall performance of the system and reduces inequalities in all areas.

To do this, they need to have access not only to inputs, but also to outcomes so they can judge if their attempts to improve quality and equity of learning opportunities are indeed making a difference.

In a converse sense, the absence of data, or the availability of bad data can leave the decision makers with no reliable evidence on which to judge whether policies and the supporting resource inputs are in fact working or not; and if not, why not?

Looking at the new agenda and its' essence to cover broad areas of lifelong learning perspectives and putting equity and quality at the forefront of education delivery, the three data priorities for the Education 2030 Agenda are:

- A broad scope across the life cycle: Indicators for areas which are on the 'margins' of the formal education system, but recognized as critically important to achieving development goals.
- Education quality: results of learning at all stages of education provision, or learning opportunities; other aspects of quality.
- Equity: measures that capture those who are excluded from education provision, or learning opportunities.

2.1 Emerging Challenges in Monitoring Education 2030

The Education 2030 Agenda calls for robust monitoring, reporting, and evaluating indicators from Early Childhood Education (ECE) to adult education. Thus, countries' capacity to respond to all the SDG 4 indicators will depend on whether a quality mechanism is in place.

Even though most of the countries in the Asia and Pacific regions have set up an education management and information system to collect, store, analyse and disseminate education data as a pillar of their decision-making processes, diverse challenges still exist across both regions to monitor progress on SDG 4 targets and these challenges are listed in detail:

Data production systems not ready for Education 2030: Basic education is the only area where more than 90 per cent of Asia and Asia-Pacific countries have a decent system to collect data. The lack of *holistic* data collection systems in education sub-sectors and the challenges in some phases of the data production cycle impedes countries from generating the necessary indicators. Similarly, resource constraints in terms of technical, financial and human resources are barriers to increasing indicator availability.

Need for multiple data sources: Education 2030 will require the adoption of new indicators, new measurements and new tools for monitoring and some SDG 4 targets. For example, global citizenship education and Non-Formal Education (NFE) are difficult to measure if a reliance is made on traditional data collection mechanisms. While many indicators that are derived from administrative sources are more likely to be collected by most of the countries, data from other sources, such as household surveys, or other alternative sources are not found in a significant proportion of countries. The use of multiple sources of information will be critical in collecting data for Education 2030.

Dearth of disaggregation to measure equity: The Education 2030 Agenda has a strong focus on equity. Without having data for all the desirable disaggregation, it is not easy to measure an existing inequity. Currently, only three per cent of indicators can be disaggregated by the five proposed characteristics. In order to better identify the dimensions of disadvantage in education and measure equity and inclusion, efforts should be made to increase the capacity of governments to disaggregate data where relevant by sex, age, location, ethnicity and disabilities.

Need to harmonize the measurement of learning outcomes: Five out of seven SDG 4 targets include and focus on learning outcomes. Various methodologies and processes have been developed and applied to measure learning outcomes at the national level. However, each assessment has its own framework and methodology. Thus, there is no standardized, nor comparable method to measure learning outcomes across countries.

Lack of culture of data sharing and cooperation: Although many types of data and indicators are collected by different departments and ministries, they are not generally shared and are not easily accessible. Establishing a culture of data sharing for cooperation among data producers is crucial for effective monitoring of the Education 2030 Agenda. Information from civil society organizations (CSOs) and other non-traditional education providers, which might collect data on aspects of education that are not covered by the traditional education providers, should be taken into consideration to fill data gaps.

2.2 An effective implementation of SDG 4 calls for a system-wide approach

The effective implementation of SDG 4 calls for a system-wide change in countries. These may relate to the following actions:

- Broaden the conceptual understanding of inclusion and equity.
- Develop relevant measurements for inclusion/inclusiveness.
- Embed inclusion, equity and gender equality in existing and core education policy and plans – not as separate policies.
- Address policies at all levels of a national education system, including at the classroom level.
- Ensure multiple level and cross-sectoral interventions, ranging from education, health, social, economic, legal, political, cultural or attitudinal are required.
- Collect and build evidence from various sources to inform policy making and planning processes.
- Make effective use of ICT and assistive technology to facilitate access and participation in learning.

2.3 Coordination mechanisms at the different levels

Effective coordination between different players is very important for SDG implementation. The following figure illustrates the coordination mechanisms at the global, regional and national levels:

Figure 5: SDGs are connected: Centrality of Education



3 Overview of the Modules

Module 1: Monitoring SDG 4 - Global and Thematic Indicators and International Comparable Education Statistics

This module introduces the Incheon Declaration and SDG 4-Education 2030 monitoring framework and compares SDG 4 with the earlier MDG 2 on education. It introduces the different levels of monitoring SDG 4 and all the SDG 4 indicators. The module then discusses the concepts of an indicator, the sources we can draw upon to collect data from and the elements to ensure we capture quality data. The third major part of this module familiarizes the reader with the requirements for international reporting of comparable education data.

Module 2: Developing a National Education Indicator Framework and Strategies for Education Statistics

The purpose of this module is to strengthen institutional capacities. Therefore, this module elaborates on the organizational and institutional aspects of managing data, while also introducing National Strategies for the Development of Education Statistics (NSDES) which aid in the formalization of responsibilities of different institutions in the development of national statistical capacities and ultimately in monitoring education sector performance.

The module will elaborate step-by-step on procedures to develop a National Education Indicator Framework (NEIF) and explain the mapping of data sources, as well as a detailed assessment of data quality. These elements form part of NSDES and are crucial for the introduced results-based management approach in establishing NSDES.

Module 3: Strengthening the Education Management Information System for Monitoring SDG 4

This module has been prepared with the intention of familiarizing readers with the basics of structuring and managing an Education Management Information System (EMIS), as well as to raise awareness about the importance of EMIS in monitoring SDG 4. This module seeks to facilitate a better understanding of what constitutes an enabling environment, a support system, the production of quality data and the dissemination of such data. It also facilitates a better understanding of data gaps and how to address them.

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This supports the collection of individual data at the school level through a School Management and Information System (SMIS) and its integration into the EMIS. Topics such as 'innovation,' 'big data' and the collection of qualitative data and their integration into EMIS are deliberated in this module.

Module 4: Household Surveys for Monitoring SDG 4

This module familiarizes readers with the types of household surveys that exist and it details how to utilize these surveys more effectively to monitor education in terms of SDG 4, which will subsequently aid in establishing better collaborations between survey designers and education specialists. The module illustrates what education indicators can be retrieved from household surveys, as well as the challenges in collecting education related data. This module also provides guidance on setting up an institutional mechanism for collaboration in order to ensure the application of household surveys to their full potential in producing SDG 4 indicator data.

Module 5: Analyzing Data and Communicating the Results

One of the challenges regional countries are facing is an inability to analyse data for use at various levels. This module teaches the basics of education data analysis, starting from a distinction between qualitative and quantitative analyses, to clarifying what makes for a good indicator, with a comprehensive step by step overview of data analysis procedures. For greater clarity, the module also provides practical examples.

Data is also often not disseminated to all the relevant audiences, thus not informing many education stakeholders, such as the public, about progress or shortcomings for which support is needed in education development. The dissemination of comprehensive, reliable and timely data is increasingly viewed as an issue of transparency and thus crucial for confidence in the data. Therefore, this module is also concerned with providing illustrative examples and guidelines on disseminating education data analysis results that are relevant in the country, as well as internationally.

Module 6: Monitoring Challenges beyond Traditional Aspects of Education

The purpose of this module is to raise awareness about some of the crucial topics in monitoring SDG 4 and some that pose challenges in collecting data. Technical Vocational Training and Education, Education for Sustainable Development and Global Citizenship are inclusive environments with an eye on disability and refugee status, as well as the learning assessments that exist to assist us with capturing all the relevant populations, including those hard to reach. This module stresses the importance of the fact that we are dealing with a new, different vision of education. It underpins the point that the targets set against this goal have been inspired by a humanistic vision of education and development based upon human rights and dignity; social justice; inclusion; protection; cultural-linguistic-and-ethnic diversity; shared responsibility and accountability.