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Abstract

Education was positioned as Goal 4 (i.e., SDG4) in SDGs. SDG4 aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." The lack of education and the inability to read and write often limit access to information and disadvantage the livelihoods of people. From the perspective of acquiring knowledge and skills, along with developing human resources, it is clear that the elements of education are present across all 17 SDGs. In other words, education is a cross-cutting discipline that influences a variety of areas (Kitamura et al. 2014) and, as such, plays an important role in achieving all SDGs. The main objective of this chapter is to examine "inclusive and equitable quality education." First, this chapter provides a brief overview of international trends in educational cooperation from 1945 to 2015, covering the Education for All (EFA), Millennium Development Goals (MDGs), and SDGs. It then discusses "inclusive and equitable quality education," the core of SDG4. It specifically addresses discussions on equity, inclusion, and the quality of education. Furthermore, the quality of educa-

Waseda University, Tokyo, Japan e-mail: ytonegawa@waseda.jp tion is examined from four perspectives: school environment, educational attainment, learning achievement, and non-cognitive skills. This chapter also presents the case of education for children with disabilities in Ethiopia.

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Keywords

Inclusive education • Quality education • Equity • Education for children with disabilities • Ethiopia

4.1 Introduction

This chapter examines SDG4, which focuses on education. Today, approximately 258 million children and youths are not enrolled in school (UIS 2021b), and around 773 million adults are illiterate (UIS 2021a). Being unable to receive adequate education and thus having poor literacy levels (i.e., an inadequate ability to read and write), often mean that individuals are limited in their channels of obtaining information. This causes general disadvantages in daily life. If these individuals can gain education, it is possible to enrich and enhance their livelihoods.

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Nobel laureate Amartya Sen also states that "widening the coverage and effectiveness of basic education can have a powerful preventive role in reducing human insecurity of nearly every kind" (Sen 2003). Therefore, all 17 Sustainable Development Goals (SDGs) involve elements of education, including knowledge, skills attainment, and human resource development, as discussed later.

In this chapter, Sect. 4.2 provides an overview of international trends in educational cooperation. Section 4.3 discusses "inclusive and equitable quality education," which forms the core of the UN's Sustainable Development Goal 4 (SDG4)—the primary SDG related to education. This chapter also briefly introduces the case of education for children with disabilities in Ethiopia, based on the discussion of equity, inclusion, and quality of education.

4.2 International Trends in Educational Cooperation

4.2.1 Educational Cooperation in the Postwar Era

This section provides an overview of international trends in educational cooperation after World War II. The right to education was articulated in the Universal Declaration of Human Rights adopted by the UN General Assembly in 1948. Specifically, Article 26 states "[e]veryone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory" (UN n.d.). This declaration has led to an international consensus that education should be seen as a fundamental human right (Yoshikawa 2010).

In the early 1960s, after most colonized nations gained their independence, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) held its first International Conference on Education. At this conference, education ministers from each region gathered to formulate an action plan for education (Kuroda 2016a, b). Among the goals established at this conference were (1) the eradication of illiteracy, (2) free compulsory education, and (3) Universal Primary Education (UPE).

Similarly, the World Bank also focused on investment efficiency in education and, as a result, expanded education financing in the 1960s. Notably, since the 1980s, when the World Bank highlighted the high rate of return on primary education for society as a whole through its analysis of the rate of return on education,¹ aid for primary education by developed countries international organizations and accelerated rapidly (Kitamura 2016). Demonstrating the impact of education on economic growth has proved a major push to education support provision in low-income countries across the international community that aim for economic development.

4.2.2 From the 1990s Onward: Education for All (EFA)

4.2.2.1 World Declaration on Education for All

In 1990, the World Conference on Education for All was held in Jomtien, Thailand, as a global conference limited to the field of education. The Conference was led by UNESCO, the World Bank, the United Nations Children's Fund (UNICEF), and the United Nations Development Programme (UNDP), and culminated in a resolution for the World Declaration on Education for All (the Jomtien Declaration). Following this conference, universal access to basic education was recognized as a goal to be shared by all nations (Kuroda 2016a). Education for All (EFA) then spread internationally as a slogan related to educational cooperation, and both governments of developed countries and international organizations began to focus on support for EFA. Such focus greatly impacted the education policies in low-income countries.

¹ The rate of return to schooling equates the value of lifetime earnings of the individual to the net present value of costs of education (Psacharopoulos and Patorinos 2018, p. 3).

It should be noted that the Jomtien Declaration differs significantly from the Universal Declaration of Human Rights in that it sets specific numerical targets and target years for the purpose of meeting the goals set therein. For instance, UPE was set to be achieved by 2000, with the aim of halving the illiteracy rate recorded in 1990 (UNESCO 1990). By providing such targets, "global governance," which functions as a framework for the international community to address issues as well as to share awareness of and understand the direction of issues, has been in operation within the education sector since 1990 (Kuroda 2016b).

4.2.2.2 The Dakar Framework for Action

In 2000, the World Education Forum was held in Dakar, Senegal. At this Forum, the Dakar Framework for Action was adopted in response to nations' failure to achieve the aforementioned EFA targets. As part of this action plan, six goals were set; the deadline of 2015 was set specifically for Goals 2, 4, and 5 (see Table 4.1). The Forum was attended by more than 1100 participants representing governments, international organizations, and civil society organizations (e.g., NGOs.) from 164 countries (Sifuna and Sawamura 2010).

Of particular note is that civil society (e.g., NGOs) began influencing educational cooperation from the 1990s onward (Sifuna and Sawamura 2010). For instance, the Global Campaign for Education, whose formation was prompted by the Forum, is a coalition of global organizations of teachers' unions and NGOs working in the field of education (Miyake 2016). This campaign has now grown into a fully-fledged organization comprising membership organizations from over 100 countries. Specifically, the campaign works to ensure that all children have the right to quality education (Nishimura and Sasaoka 2016; Global Campaign for Education 2018).

Similarly, at the behest of the World Bank, the Fast Track Initiative (FTI) was established in 2002 (renamed the Global Partnership for Education (GPE) in 2011) as a means of promoting financial cooperation aimed at supporting UPE up to 2015. While the FTI initially only provided concentrated support by limiting the number of recipient nations (Kobayashi and Kitamura 2008), the GPE emphasizes international partnerships by incorporating all the least developed countries as recipients.

Furthermore, the GPE aims to ensure that different actors (e.g., developed countries, international organizations, civil society organizations, and private companies) contribute to the GPE Fund; they must also coordinate and effectively and efficiently use aid resources among one another (including the governments of low-income countries) (Kitamura 2016). In 2002, the focus was on securing funds. However, as time progressed, the goal was to achieve high-quality UPE, and from 2015 onward, they have been aiming to realize SDG4 (Kobayashi and Kitamura 2008).

Table 4.1 The Dakar framework for action

Goal 1. Expanding and improving comprehensive early childhood care and education
Goal 2. Ensuring that all children have access to and completely free and compulsory primary education of good quality
Goal 3. Ensuring the learning needs of all young people and adults

Goal 4. Achieving a 50% improvement in the level of adult literacy (especially for women)

Goal 5. Eliminating gender disparities in primary and secondary education

Goal 6. Improving every aspect of the quality of education

Source UNESCO (2000, pp. 15–17), italicized by the author

Note The deadline of 2015 was set for the three italicized targets (Goal 2, 4, and 5)

Aid coordination through such international partnerships has progressed rapidly since the early 2000s. It is now seen as an approach in which external donors collaboratively work with low-income countries' governments and provide necessary and consistent support to the country in question (Kitamura 2016). Such support is based on consistent education policies and is provided with an awareness of the division of roles. The implementation of balanced aid coordination among different actors is challenging, particularly due to the power relationships that exist between donors and low-income countries, and the ownership and capacity of low-income countries.

4.2.2.3 Millennium Development Goals (MDGs)

Among the Millennium Development Goals (MDGs), which were agreed upon at the United Nations (UN) Millennium Summit in 2000, the goals that are related to education are Goal 2, "Achieve Universal Primary Education (UPE)," and Goal 3, "Promote gender equality and empower women" (UN 2008). Therefore, both UPE and gender equality in education are further promoted across the globe. While the aforementioned Dakar Framework for Action also focuses on the quality of education, the MDGs place more emphasis on quantity (e.g., school enrollment and access) than quality.² Some criticisms and issues surrounding the MDGs include their lack of perspectives that cannot be measured quantitatively, and the levels of reliability of the data gained from low-income countries. However, both governments of developed countries and aid agencies have focused their efforts on educational cooperation in a bid to achieve the MDGs.

4.2.2.4 Progress and Evaluation of International Cooperation in Education up to 2015

The achievement deadline of the Dakar Framework for Action and MDGs was set for 2015, at which time these initiatives' achievements were evaluated. The United Nations Millennium Development Goals Report 2015 gave relatively high marks to education (UN 2015). For instance, enrollment rates in low-income countries were found to have increased for both boys and girls, and the reduction of gender disparities in enrollment at the level of primary and secondary education was also mentioned (UN 2015). Notably, in sub-Saharan Africa, the net enrollment rate in primary education increased significantly from 52% in 1990 to 80% in 2015 (UN 2015). In addition, many low-income countries implemented compulsory and free primary education as a policy aimed at achieving UPE. According to UNESCO (2015, p. 20), in sub-Saharan Africa, 15 countries were found to have made primary education free, after 2000.³ Free education was also observed to have reduced the general cost of education for parents/guardians, thereby further contributing to the increase in enrollment rates in primary education.

However, the report also indicated that the increase in the overall completion rate of the final year of primary education was miniscule and varied significantly across countries (UNESCO 2015, p. 20; Sifuna and Sawamura 2010). In addition, although the school enrollment rate in general has increased since the implementation of the Dakar Framework and MDGs, many children are still left out of the schooling system.

According to later findings by UNESCO, in 2018, there were approximately 59 million primary school-aged children not attending school (UIS 2021b). It was also found that many

 $^{^{2}}$ In terms of the quality of education, Goal 2 indicators include "the proportion of students enrolled in Grade 1 who reach the final year of primary education" (UN 2008).

³ The adoption of a free primary education system was widely used in election pledges, as it was easy for voters to understand and for parties to gain support. This system was thus adopted in many countries as a result of domestic political motives (UNESCO 2015; Sifuna and Sawamura 2010).

children still do not possess basic learning skills, even though they are enrolled in school. An earlier study by Ogawa and Nishimura (2015), who conducted a survey in four African nations, found that many local residents and parents who had been actively involved in schools before primary education became compulsory and free, began leaving matters related to schooling to government administration, and their attitudes toward schooling became more passive. As shown here, while some progress has been made toward achieving the MDGs, new issues have simultaneously been identified.

4.2.3 From 2015 Onward: Sustainable Development Goals (SDGs)

In September 2015, when the deadline for achieving the MDGs arrived, the United Nations Sustainable Development Summit was held, and the SDGs were adopted. UNESCO (n.d., 2016) states that the elements of education are present across all 17 SDGs from the perspective of acquiring knowledge and skills, along with developing human resources, as shown in Table 4.2. In other words, education is a cross-cutting discipline that influences a variety of areas (Kitamura et al. 2014) and, as such, plays an important role in achieving any given SDG.

Education was positioned as Goal 4 (i.e., SDG4) in SDGs. SDG4 reflects the concept of inclusive education, which not only reflects access to education, but also outlines the quality, equity, and diversity related thereto (see Table 4.3). In addition, the 10 targets underpinning SDG4 are divided across various educational fields, from pre-primary education to higher education, vocational training, adult education, gender, and peace education. Although indicators are provided for each target, these differ significantly from the MDGs, in that they include perspectives on the content and quality of education that cannot only be measured quantitatively. However, criticism has been leveled at the SDGs with respect to how, despite having incorporated diverse opinions, these goals are incredibly complex and have included targets that are difficult to monitor as a whole.

4.3 What is "Inclusive and Equitable Quality Education?"

Thus far, this chapter has reviewed international cooperation in education toward the adoption of SDGs. This section shifts focus to examine "inclusive and equitable quality education," which forms the core of SDG4. This examination is presented by dividing the section into three main points: equity, inclusion, and quality of education. This section also briefly introduces the case of education for children with disabilities in Ethiopia, based on the discussion of equity, inclusion, and quality of education.

4.3.1 Equity

Prior to the adoption of SDGs, the focus had been on correcting gender disparities in school enrollment, and achieving equality in terms of quantity had been emphasized rather than the promotion of equity (Kuroda 2014; Nishimura and Sasaoka 2016). Nishimura and Sasaoka (2016) describe the equality and equity of education as follows: equality refers to a state in which all people are equal, while equity refers to the different educational treatment of people in different environments to achieve equality (Nishimura and Sasaoka 2016). From the viewpoint of equity, it is justifiable to offer more support to groups who are in a position of disadvantage (Miwa 2005). UNESCO (2017) thus analyzed the equity of education based on items such as gender equality, geographical conditions, income status, language, and disability.

In addition, Schleicher (2014, p. 19) argued that equity in education can be interpreted from two perspectives, namely, fairness/equity and inclusion/inclusiveness. The perspective of fairness refers to education not being restricted by gender, ethnic group, family environment, or other personal or socioeconomic conditions. In

Table 4.2 Relationship between SDGs and education		
Goal 1 No poverty	Access to education contributes to poverty reduction. An educated population can make informed decisions contributing to equal rights and to granting basic services. This includes ownership and control over land and property, inheritance, and financial services	
Goal 2 Zero hunger	Education is key to acquiring the necessary knowledge to increase agricultural production and the income of small farmers. Correct and up-to-date knowledge also helps to prevent problems potentially causing famines, such as drought, floods, and other disasters	
Goal 3 Good health and wellbeing	Education provides relevant knowledge and information about health issues including reproductive health, spread of disease, healthy lifestyles, and well-being	
Goal 5 Gender equality	Gender-sensitive education encourages the participation of women and girls in all political, economic, and social spheres by making sure they are heard and have real opportunities to fully participate. Furthermore, it contributes to putting an end to practices and traditions that impair the physical, mental, and sexual health of women and girls	
Goal 6 Clear water and sanitation	Comprehensive water education provides the necessary tools to monitor water quality in order to reduce contamination. It also helps to improve water use by developing greater resources for its reuse. Moreover, it contributes to raising community awareness to ensure that they play an active part in improving water management and sanitation	
Goal 7 Affordable and clean energy	Energy education promotes energy efficiency, teaching us to develop new technologies, and encouraging us to work together to research and develop renewable and clean energy resources	
Goal 8 Decent work and economic growth	Technical and Vocational Education and Training (TVET) aims to reduce the number of unemployed youth by increasing access to training opportunities. Quality education also raises awareness about forced and child labor and helps prevent and eradicate them in all their existing forms	
Goal 9 Industry, innovation and infrastructure	Education is necessary to develop the skills required to build more resilient infrastructure and more sustainable industrialization. Allocating resources for research is key to addressing each country's specific needs in the field of industry and infrastructure, and in order to improve its technologies	
Goal 10 Reduced inequalities	Education contributes to raising awareness about existing inequalities and contributes to ensuring that laws and social programs primarily protect disadvantaged and vulnerable people. It helps to empower and promote the social, economic, and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion, economic, or other status	
Goal 11 Sustainable cities and communities	Education contributes to providing the appropriate tools to ensure the monitoring of waste management and air quality. It prepares communities to manage their resources properly and tackle climate change. Through participatory approaches, communities are engaged in discussions and in planning activities for the improvement of their own cities	
Goal 12 Responsible consumption and production	Education contributes to reducing the generation of waste through the introduction and practice of the four 'Rs'—Reduce, Reuse, Recycle, and Recover. By keeping the public informed and educated, the necessary tools to live in harmony with nature for sustainable lifestyles are provided	
Goal 13 Climate action	Improved Climate Change Education (CCE) raises awareness about human and institutional capacity on climate change mitigation, adaptation, and impact reduction, as well as on early warning systems	
Goal 14 Life below water	Education contributes to developing awareness of the marine environment and building proactive consensus regarding wise and sustainable use	

(continued)

Table 4.2 Relationship between SDGs and education

Goal 15 Life on land	Biodiversity education contributes to integrating protective ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts
Goal 16 Peace, justice and strong institutions	An educated society ensures that its citizens are consulted and that its government makes decisions with the interest of children and adults at heart
Goal 17 Partnerships for the goals	Education allows engagement with organizations and individuals working on various topics that relate to the global goals. With international support, effective and targeted capacity-building activities can be implemented in low-income countries allowing them to support national plans to implement all the SDGs

Table 4.2 (continued)

Source Prepared by the author, based on UNESCO (n.d., 2016, p. 8)

Table 4.3 SDG4 and targets

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Target 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

Target 4.2. By 2030, ensure that all girls and boys have access to quality early childhood development, care and preprimary education so that they are ready for primary education

Target 4.3. By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

Target 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

Target 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 peoples and children in vulnerable situations

Target 4.6. By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy

Target 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 of culture's contribution to sustainable development

Target 4.a. Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, nonviolent, inclusive and effective learning environments for all

Target 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 programs, in developed countries and other developing countries

Target 4.c. By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states

Source UNESCO (2016, pp. 36-37)

turn, equity from an inclusion perspective relates to how all students should acquire at least basic academic skills (Schleicher 2014). In other words, equitable education is concerned with helping students develop their potential learning abilities without experiencing any barriers. The interpretation of equity based on these two perspectives is also consistent with the concept of inclusive education, which is discussed in more detail later. Furthermore, Nishimura and Sasaoka (2016) compared the definitions of equity established by the four international organizations (i.e., the World Bank, OECD, FTI, and UNESCO) and highlighted that equity has generally been understood at different levels and has, therefore, not been agreed upon internationally. In the future, it would be necessary to pay close attention to how the international community might reach an agreement on the best approach to achieve equity. Currently, however, it is clear that equity is closely related to both the quality and inclusive nature of education. It is therefore important to consider these perspectives com-

prehensively when considering specific approa-

4.3.2 Inclusion

ches to education.

4.3.2.1 Inclusive Education

As noted previously, SDG4 includes an inclusion perspective. Inclusion can be defined in a variety of ways. For instance, UNESCO (2003, p. 7) defines inclusion in education as "a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education." In this sense, inclusive education is understood as an educational approach that realizes the concept of inclusive education, which values its process and response to diverse needs.

Inclusive education was internationally proposed in the Salamanca Statement, which was adopted by the World Congress on Special Needs Education (WCSNE) in 1994. Article 2 of this statement presents the basic concept of inclusive education, which can be summarized as "...every child has a fundamental right to education, and regular schools must provide opportunities for education that takes into account the special educational needs that each child has" (UNESCO and Ministry of Education and Science in Spain 1994, p. viii). The concept of integrated education, which had been the mainstream approach to schooling until the adoption of inclusive education, required that the children with special needs adapt themselves to regular classes. Inclusive education differs from this concept of integrated education in that it supports the notion that teachers and schools should respond to children's needs (Kawaguchi and Kuroda 2013).

Even in the approach to education, up to 2015, which was the aim for UPE by focusing on access to education, there still existed vulnerable children who had difficulties accessing schooling (Kawaguchi and Kuroda 2013; Hayashi 2016). For instance, children with disabilities, children in minority groups from the perspective of race, ethnicity, and language, children in low-income families, and other children from various backgrounds were found to have different educational needs. Education methods that meet diverse educational needs and address equity are thus an important approach that should be employed to improve the quality of education.

4.3.3 Quality of Education

The importance of quality learning in the classroom is confirmed by the Dakar Framework for Action, with Goals 2 and 6, including a quality of education perspective (see Table 4.1). However, due in part to the impact of the MDGs, the international focus has tended to be predominantly on the quantity of education. Following the MDGs, since there has been some progress with respect to the quantity of education, SDG4 now emphasizes the quality of education. However, the interpretation of what the quality of education entails is diverse. As a more comprehensive interpretation, according to the "EFA Global Monitoring Report 2005," quality education is based on educational objectives defined in a social context (UNESCO 2004). This perspective of addressing the social context is also consistent with the previously presented concepts of equity and inclusive education.

Nishimura (2018, p. 2) further indicated that previous educational cooperation had been centered on the "theory of defects," which focused on the shortcomings and weaknesses of lowincome countries, based on their comparison with developed countries. Rather, Nishimura (2018, p. 2) described the importance of the "theory of context," which presupposes education in accordance with the context of each individual country and unique society. With respect to such noted differences in theory and approach, the quality of education has characteristics that make it difficult to set indicators and measure growth. This section specifically considers the quality of education from four perspectives: school environment, educational attainment, learning achievement, and noncognitive skills.

4.3.3.1 School Environment

The school environment primarily includes the implementation of educational resources, including teachers, textbooks, and school buildings. Within the school environment, the issue of teacher quality has always been of particular importance, and is often discussed with respect to how the quality of teachers greatly affects education (Saito 2008). With the noted expansion of access to education and rise in enrollment rates, the number of students in one class has increased, along with the ratio of students to teachers. This increase and subsequent imbalance are due to various factors, including a shortage of teachers, a restricted education budget, and low teacher salaries. In terms of the ability of the teacher, the ratio of qualified teachers is sometimes used as an index. For instance, data regarding teachers with minimum qualifications in primary education indicate significant differences: 61.5% in Ghana (2019), 63.6% in Sierra Leone (2019), and 15.3% in Madagascar (2019) (World Bank 2021). Such data highlight that there are countries with insufficient numbers of teachers with minimum qualifications in primary education.

In addition, in many low-income countries, there are issues related to the abilities of teachers. Such issues are often the result of the potentially poor contents of pre-service teacher education at teacher training schools, and/or the absence of inservice training. Teacher training schools in many low-income countries have also been found to contain biases in their taught content and often lack practical training, such as preparing teaching manuals and/or conducting classes (Hamano 2005). There are also many cases where in-service training is not institutionalized (Hamano 2005).

The physical school environment has also been found to influence the quality of education. There are many instances in low-income countries where teaching materials are scarce and a single textbook has to be shared by several students. Other issues such as scarce school equipment (e.g., desks and chairs), as well as a lack of properly installed toilets and drinking water facilities, have been noted. There is often no electricity available in schools. Various efforts have been made in low-income countries to improve the quality of education based on the school environment.

4.3.3.2 Educational Attainment

Until the 1980s, the quality of education was mainly measured from a quantitative perspective that considered the degree of educational attainment, along with the school environment. A typical indicator included the completion rate. For instance, in the EFA Development Index, developed by UNESCO to measure the progress of the Dakar Framework for Action, the survival rate from entering primary school to reaching the fifth grade is adopted as an index to measure education quality (UNESCO 2010). Indicators related to Goal 2 of the MDGs similarly include "the proportion of students enrolled in Grade 1 who reach the final year of primary education," and have been used extensively to measure education quality.

In 2019, the global average completion rate of primary education rose to 89.5% (World Bank 2021). However, there are many low-income countries where it is common for children to leave primary school for a variety of reasons, including helping with household chores, working to support their families, and/or early marriage. For instance, in 2019, the completion rate of primary education was only 55% in Mozambique, 64% in Benin, and 65% in Burkina Faso (World Bank 2021). Such findings indicate that many children are still unable to complete primary school, even if they have been enrolled for primary education.

As noted previously, the completion rate, which is easy to measure as a numerical value, has often been used to measure the quality of education. However, the completion rate is affected by various factors, depending on the country. Such factors include the presence/absence of automatic promotion, as well as the voluntary repetition of a year to obtain higher scores in the final year exam. For instance, in Kenya, students need to score high on their final exam to secure a place in a good secondary school (Sawamura 2006). In addition, it has become increasingly clear that some children are not learning, even when they attend school. The limitations of understanding the quality of education based on educational attainment alone have also come to the fore. Against such realities, learning achievement has started to receive more attention.

4.3.3.3 Learning Achievement

Learning achievement (i.e., academic abilities) began to gain attention from the late 1990s (Miwa 2005). A national learning assessment was conducted at each nation's level to measure learning achievement. Internationally, there also now exist the Trends in International Mathematics and Science Study (TIMSS), conducted by the International Association for the Evaluation of Educational Achievement (IEA), the Progress in International Reading Literacy Study (PIRLS), and the Programme for International Student Assessment (PISA), participated in by the majority of Organisation for Economic Cooperation and Development (OECD) nations.

As noted previously, while the MDGs brought attention to access to education, they also revealed that many students did not acquire basic academic skills, despite attending school. This result was to seek a more comprehensive measurement of learning achievement. A 2017/8 UNESCO report, for instance, found that onethird or less of students met the minimum proficiency levels in mathematics at the end of primary education in Chad, Kuwait, and Nicaragua; less than half of students met the minimum proficiency levels in reading at the end of primary education in Cameroon, Congo, and Togo (UNESCO 2017, p. 35) In Central and South Asia, 79% of children in their final years of primary school were found to lack the necessary reading comprehension skills (UIS 2017).

Similarly, according to a 2017/8 UNESCO report, national learning assessments of reading comprehension and mathematics are being conducted at the end of primary and/or lower secondary education in approximately half of the countries in the world (UNESCO 2017, p. 34). while Furthermore, international learning assessments, such as the TIMSS and PISA, can be compared among participating countries, some have noted that local and national educational cultures and traditions are often overlooked. Therefore, some leaning assessments are currently being conducted at the local level to reflect the regional characteristics. One example of such assessments is the "Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ)," which is presently being conducted in Eastern and Southern Africa to better measure education quality in these countries. The OECD also developed a "PISA for Development (PISA-D)" for implementation, aimed at low- and middle-income countries (OECD 2020).

In addition to measuring learning achievement levels, learning assessments conducted by civil society organizations are being implemented in an attempt to provide feedback to local residents and make recommendations to relevant governments. An NGO located in India, called Pratham, has further formed a partnership with the central government in order to annually assess and publish the educational situation of children living in rural areas (World Bank 2018, p. 5; Pratham Mumbai Education Initiative 2018). Similarly, in Kenya, an NGO called UWEZO conducts a learning assessment based on a household survey (Nishimura 2016). Such household survey-based assessments by civil society organizations are also being conducted in other countries. As shown here, learning achievement assessments are conducted not only to ascertain a country's academic ability state, but also to make concrete improvement measures based on the results while reflecting public opinion.

4.3.3.4 Non-cognitive Skills

The quality of education that this chapter has detailed thus far has primarily focused on the cognitive skills associated with academic abilities. SDG4 also includes references to noncognitive skills. Non-cognitive skills relate to skills such as communication, critical thinking, ethics, and citizenship. The OECD (2015, p. 34) calls non-cognitive skills "social and emotional skills," and presents three skills related to "achieving goals," "working with others," and "managing emotions." Skills for achieving goals comprise perseverance, self-control, and passion for goals; skills for working with others comprise sociability, respect, and caring; skills for managing emotions comprise self-esteem, optimism, and confidence (OECD 2015, p. 34). Improving non-cognitive skills is an important perspective not only in low-income countries, but also in developed countries.

Furthermore, the global citizenship education and Education for Sustainable Development (ESD) included in SDG4 also correspond to improvements in non-cognitive skills. There has been insufficient agreement on specific educational content pertaining to global citizenship education and ESD. For instance, according to UNESCO (2013, p. 3), global citizenship education aims to "empower learners to engage and assume active roles both locally and globally to face and resolve global challenges and ultimately to become proactive contributors to a more just, peaceful, tolerant, inclusive, secure and sustainable world." ESD aims to empower "learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity" (UNESCO 2014, p. 12).

ESD is further defined as relating to any type of learning or activity that aims to create a sustainable society by perceiving various issues. These include the environment, poverty, human rights, peace, and development as one's own issues, thereby creating new values and actions that could lead to the resolution of such issues (Ministry of Education, Culture, Sports, Science and Technology in Japan 2013). In particular, Japan actively promoted ESD in cooperation with NGOs and advocated for the "United Nations Decade of Education for Sustainable Development (ESD)" at the World Summit on Sustainable Development (Johannesburg Summit) in 2002. In the final year of the "UN Decade of ESD" (i.e., from 2005 to 2014), the UNESCO World Conference on ESD was held in Nagoya City in the Aichi Prefecture, and Okayama City in the Okayama Prefecture of Japan.

ESD includes not only environmental studies but also education for disaster preparedness⁴ (Motoyoshi 2013, p. 153). Japan experienced many disasters, including the Great Hanshin Earthquake in 1995 and the Great East Japan Earthquake in 2011. Based on these experiences, education for disaster preparedness has been provided in the schools in Japan. As an advanced country in disaster prevention, Japan aims to build a sustainable and resilient society against disasters by sharing its relevant knowledge and technology with the world.

Since the realization of a sustainable society and providing education that reflects the social context are increasingly being sought, many countries now need to improve education for both the cognitive and non-cognitive skills of their citizens. The quality of education is expected to improve through the implementation of education aimed at acquiring and improving non-cognitive skills. However, there are many challenges associated with implementing education related to non-cognitive skills, especially since cognitive skills have been prioritized for so long. For instance, since international learning assessments have emphasized cognitive skills, many countries consider cognitive skills as indicators of a nation's international competitiveness; education concerning non-cognitive skills has not been adequately provided⁵ (Kitamura et al. 2014; Sudo 2010).

⁴ Education for disaster preparedness refers to education that focuses on learning how to protect yourself from disasters and other risks present in society (Motoyoshi 2013, p. 153).

⁵ PISA pursues PISA-type academic abilities that focus on problem-solving and that include the degree to which knowledge and skills can be used in various situations in real life (Sudo 2010).

Additionally, with regard to educational systems where entrance examinations are emphasized, cognitive skills have consequently been emphasized, while education pertaining to developing non-cognitive skills has been neglected (World Bank 2018, p. 5). Determining how and how much education related to non-cognitive skills should be included in a curriculum has been met with various challenges, since such determinations are closely linked to the education policy and system of the country in question.

4.3.4 Case Study: Education for Children with Disabilities in Ethiopia

Inclusive education is practiced in many lowincome countries, often focusing on children with disabilities. Based on the discussion of equity, inclusion, and quality of education discussed thus far, this section introduces the case of education for children with disabilities in Ethiopia.

4.3.4.1 Overview of Education for Children with Disabilities in Ethiopia

The Federal Democratic Republic of Ethiopia, located in East Africa, implements inclusive education mainly for children with disabilities. The "Special Needs Education Program Strategy" was formed in 2006 and revised in 2012 as the "Special Needs/Inclusive Education Strategy." Based on this policy, the purpose of special needs/inclusive education in Ethiopia is "[t]o build an inclusive education system which will provide quality, relevant and equitable education and training for all children, youth and adults with special educational needs (SEN) and ultimately enable them to fully participate in the socio-economic development of the country" (Ministry of Education [MoE] in Ethiopia 2012, p. 12). Therefore, the establishment of an inclusive society is one of the goals of inclusive education in Ethiopia.

The gross enrolment ratio⁶ for primary education (grades 1–8) in Ethiopia is 119.4% (male: 125.1%; female: 113.5%) (UIS 2021c). The number of children with disabilities enrolled at the primary education level in 2018/19 was 316,271, with a gross enrolment ratio of 11.0% (male: 12.3%; female: 9.7%)⁷ (MoE in Ethiopia 2019). Therefore, the enrollment rates for children with disabilities are significantly lower than those for primary education enrollment in Ethiopia as a whole.

4.3.4.2 Ethiopia's Response to the International Approach

In developing inclusive education with respect to the education of children with disabilities, many countries have accommodated children with disabilities in regular schools, as well as closed special schools⁸ (Gedfie and Neggasa 2019; NESSE Network of Experts 2012; Takahashi et al. 2013). Such an approach has been influenced by the adoption of the understanding that "every child has a fundamental right to education, and regular schools must provide opportunities for education that takes into account the special educational needs that each child has," as set out in Article 2 of the Salamanca Declaration, where the term "regular school" is included within the basic concept of inclusive education (UNESCO and Ministry of Education and Science in Spain 1994, p. viii). This view of including all children in the same environment also overlaps with the perspective of equality.

⁶ Gross enrollment ratio is defined as the "number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education" (UIS n.d.). The net enrollment ratio for primary education in Ethiopia was 87.2% (male: 91.2%; female: 83.2%) in 2020 (UIS 2021c).

⁷ The Ministry of Education in Ethiopia calculates the number of people with disabilities as 15% of the population based on WHO standards.

⁸ For instance, Norway (Takahashi et al. 2013), Greece (NESSE Network of Experts 2012), Italy (NESSE Network of Experts 2012), and South Africa (Gedfie and Neggasa 2019).

Influenced by this international approach, in Ethiopia, special schools/classes are currently transitioning toward regular schools/classes, while regular schools are simultaneously beginning to accept children with disabilities. Specifically, special schools/classes for children with hearing impairments are shifting toward regular schools/classes. In addition to the two schools studied by the author in Addis Ababa, namely, School A and School B, according to interviews with an official from the Ministry of Education,⁹ three special schools for children with hearing impairments in other regions have also shifted in recent years to "regular schools" that accept children without disabilities. This shift suggests that unification between special and regular schools takes place throughout Ethiopia.

School A, which was a special school for children with intellectual disabilities and children with hearing impairments, has become a regular school, and a special class for children with hearing impairments present in this school now also accepts children without disabilities.¹⁰ Furthermore, School B accepts children without disabilities in special classes for children with hearing impairments, thereby turning these classes into "regular classes". However, sign language is maintained as the medium of instruction in these "regular classes" at both schools. Many of the students who are enrolled in both schools have disabilities; children without disabilities are in the minority in these classes.

4.3.4.3 Perceptions of "Regular Classes"

This research revealed that some parents of children without disabilities enrolled in these "regular classes," have placed importance on the educational environment. For instance, in these "regular classes," which are former special classes, the number of students in a class is small and, in many cases, an environment is fostered in which teachers can provide adequate consideration to each student. It can further be inferred that for children from economically disadvantaged families who are unable to attend private schools, these "regular classes" provide a place where they can enjoy quality education that better meets their needs.

Conversely, the unification of special schools/classes into regular schools/classes has been criticized. For instance, teachers with hearing impairments have noted that in the current environment, where children with hearing impairments learn alongside hearing children, children with hearing impairments are often unable to sufficiently learn sign language, which is their first language.

This indicates that there are educational needs that cannot be met by unifying special schools/classes into regular schools/classes; there is a demand for special schools/classes in Ethiopia. UNESCO (2003, p. 7) defines inclusive education as "a process of addressing and responding to the diversity of needs of all learners." To achieve quality education that meets the needs of individual students, it is necessary to continue to explore ways of realizing both an equitable and inclusive education system in its true form, where teachers and schools effectively respond to the needs of students.

4.4 Concluding Remarks

The first half of this chapter provides an overview of the international trends in educational cooperation. The second half examined "inclusive and equitable quality education," as included in SDG4.

From the perspective of acquiring knowledge and skills, along with developing human resources, it is clear that the elements of education are present across all 17 SDGs, as shown in Table 4.3. In other words, education is a crosscutting discipline that influences a variety of areas (Kitamura et al. 2014) and, as such, plays an important role in achieving all SDGs.

⁹ Online interview with a Special Needs Education Official of Ethiopia's Ministry of Education, August, 2020.

¹⁰ Special classes for children with severe intellectual disabilities as well as children with autism are continued in School A.

The closely related concepts of equity, inclusion, and quality of education reexamine the ways in which education should be conducted for vulnerable children whose education has previously been hindered. This chapter noted that despite inclusive education based on the concept of equity, holding within it many issues related to interpretation and implementation, it is still believed to be able to improve the quality of education and contribute to the development of the full potential of all children. Of further note was that while "inclusive, equitable, and quality education" is unlikely to be uniform, it still needs to be implemented in alignment with the social context of each country. Such an implementation should also take into account the needs of each country's diverse situations.

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