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The Global Education 2030 Agenda

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SHORT SUMMARY

This report documents progress made towards the achievement of SDG 4 in the Asia-Pacific region since the ambitious vision for Education 2030 was set in 2015. It analyses the regional context, challenges and opportunities, and provides policy recommendations through the lens of the overarching themes of equity and inclusion, while also considering the impact of the COVID-19 pandemic.



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Foreword

Education systems across the Asia-Pacific are complex and diverse. Their design reflects countries' history, policies and means, which consequently affects their operation, achievements and failures.

In 2015, countries launched a plan of action with strategies to tackle the multiple challenges they face in providing every child with relevant and meaningful learning. This has not been an easy endeavor. The COVID-19 pandemic jeopardized many of these strategies, forcing governments and partners to adapt and make learning modalities more flexible. The traditional *modus operandi* of education systems was turned upside down.

The 5-Year Progress Review of SDG 4 – Education 2030 in Asia-Pacific documents the progress and developments made within the last five years since the ambitious vision for the Education 2030 agenda was set. Furthermore, it also presents analyses and adjustments made due to unforeseen challenges brought by the COVID-19 pandemic. In this ambitious review, it addresses a number of pertinent questions:

How far have countries progressed in the first five years of SDG 4 and what have they achieved? What are the lessons learnt? What opportunities has the COVID-19 pandemic disrupted, and which new opportunities have emerged? Are education systems more equitable and inclusive? Are our children, boys and girls, learning more? Are schools working better than before? And regardless of these changes, are countries prepared to protect their education systems?

Gathering ample data is critical to answering these questions and identifying the most vulnerable, as well as for understanding where the problems lie and developing strategies so that every child has access to inclusive and equitable quality education. The COVID-19 pandemic has shown that years of progress can be reversed within months, hopefully, only temporarily. This report is a call to action to enhance the monitoring of progress through data and benchmarks, and to enhance efforts towards the achievement of SDG 4.

This review recognizes that while different regions and sub-regions face similar external and internal barriers to education, each country and community also faces unique challenges based on their context and the resources available to them. A holistic view of progress in the Asia-Pacific provides a deeper understanding of trends in the region, while the case studies highlight how countries and sub-regions have used innovative practices to progress towards SDG 4 in their specific contexts.

The shift towards online education, and flexible learning approaches inspired by creative responses to COVID-19, has shown that there is still a need to address the digital divide as inequities in education through alternative modes of learning, teaching and training.

While it is important to reflect the impact of the pandemic on policy implementation and strategies, it is essential that baseline trends are evaluated carefully, especially when allocating resources and budgets prior to the midterm review of the national progress towards SDG 4 – Education 2030 recommended to be carried out in 2023. Policies should not only be created to address emerging issues, but also to respond to an analysis of what has and has not worked, and assess which practices can be replicated or adapted in other countries.

Improving the quality of education is imperative for countries to achieve SDG 4. Ministries of education, sub-regional organizations, and development partners all have a critical role to play if countries are to regain the momentum required to achieve all ten SDG 4 targets by 2030.

Existing challenges have been heightened and new challenges have emerged. Maintaining or increasing funding, as well as strengthening regional partnerships and collaboration will be critical in securing the future of our education systems. This paradigm shift is an opportunity to find new solutions to ensure that we reach the most vulnerable and disadvantaged. The goal of education for all is in sight – our plans and actions in the near future will help determine how we get there.

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Acronyms

5PR	5-Year Progress Review
ABL	Activity-Based Learning
ADB	Asian Development Bank
APMED	Asia-Pacific Meeting on Education 2030
ASEAN	Association of South East Asian Nations
ASER	Annual Status of Education Report
CALP	Central Asian Leadership Programme on Environment for Sustainable Development
CAREP	Regional Environmental Centre for Central Asia
СВО	Community-based Organization
ССТ	Conditional Cash Transfer
CEDAW	Convention on the Elimination of all Forms of Discrimination Against Women
COVID-19	Coronavirus Disease of 2019
CRPD	Convention on the Rights of Persons with Disabilities
CSE	Comprehensive Sex Education
CSO	Civil Society Organization
CwR	Connect with Respect
DAI	Digital Adoption Index
EAPRO	UNICEF East Asia and Pacific Regional Office
ECCD	Early Childhood Care and Development
ECCE	Early Childhood Care and Education
ECD	Early Childhood Development
ECI	Early Childhood Intervention
EFA	Education for All
EMIS	Education Management Information System
EPR	Employment-to-Population Ratio
ESCS	International Economic, Social, and Cultural Status Index
ESD	Education for Sustainable Development

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ESCAP	Economic and Social Commission for Asia and the Pacific
ESCWA	Economic and Social Commission for Western Asia
EU	European Union
FQKEP	Free Quality Kindergarten Education Policy
GAP	Global Action Programme
GBV	Gender-Based Violence
GCED	Global Citizenship Education
GDP	Gross Domestic Product
GEM Report	UNESCO Global Education Monitoring Report
GER	Gross Enrolment Ratio
GNI	Gross National Income
GPE	Global Partnership for Education
GPIA	Adjusted Gender Parity Index
GPI	Gender Parity Index
GREP	Pakistan's Girls' Right to Education Programme
GSIM	Gender Sensitive Indicators for Media
IAEG-SDGs	Inter-agency and Expert Group on SDG Indicators
ICT	Information and Communication Technology
IDP	Internally Displaced Persons
ILO	International Labour Organization
IPDC	UNESCO's International Programme for the Development of Communication
ITA	Idara-E-Taleem-o-Aagahi
KP	Khyber Pakhtunkhwa
LDC	Least Developed Countries
LGBTI	Lesbian, Gay, Bisexual, Transgender and Intersex
LIC	Low-Income Country
LMIC	Lower Middle-Income Country
LPI	Location Parity Index
LPIA	Adjusted Location Parity Index

MDG	Millennium Development Goal
MENAP	Multi-lingual Education National Action Plan
MG	Multi-Grade
MGT	Multi-Grade Teaching
MICS	Multiple Indicator Cluster Survey
MTB-MLE	Mother Tongue-based Multilingual Education
NER	Net Enrolment Ratio
NFBE	Non-formal Basic Education Centres
NGO	Non-Governmental Organization
ОСНА	Office of Coordination of Humanitarian Affairs (UN)
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PILNA	Pacific Islands Literacy and Numeracy Assessment
PISA	Programme for International Student Assessment
PISA-D	PISA for Development
PPP	Public-Private Partnership
PQTR	Pupil-qualified Teacher Ratio
PTR	Pupil-Teacher Ratio
PTTR	Pupil-Trained Teacher Ratio
ROSA	UNICEF Regional Office for South Asia
RRR	Regional, Rural and Remote
RTE	Right to Education
RTWG	Regional Thematic Working Group
SAARC	South Asian Association for Regional Cooperation
SDG	Sustainable Development Goal
SEAMEO	Southeast Asian Ministers of Education Organization
SEA-PLM	South East Asia Primary Learning Metrics
SES	Socio-economic Status
SLE	School Life Expectancy
SMC	School Management Committee

SPC	Pacific Community
SRGBV	School-Related Gender-Based Violence
TESDA	Technical Education and Skills Development Agency
TVET	Technical and Vocational Education and Training
UIL	UNESCO Institute for Lifelong Learning
UIS	UNESCO Institute for Statistics
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNGEI	UN Girls' Education Initiative
UNHCR	UN Refugee Agency
UNICEF	United Nations Children's Fund
UNICEF	United Nations Children's Fund UNESCO's University Twinning and Networking Programme
UNITIWN	UNESCO's University Twinning and Networking Programme
UNITIWN	UNESCO's University Twinning and Networking Programme United States
UNITIWN US VNR	UNESCO's University Twinning and Networking Programme United States Voluntary National Review
UNITIWN US VNR WaSH	UNESCO's University Twinning and Networking Programme United States Voluntary National Review Water, Sanitation and Hygiene
UNITIWN US VNR WaSH WDI	UNESCO's University Twinning and Networking Programme United States Voluntary National Review Water, Sanitation and Hygiene World Development Indicators
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Executive Summary

Introduction

Five years after countries committed to SDG 4, this report provides a regional review of how education systems in the Asia-Pacific region¹ have progressed towards achieving all 10 targets. It considers specific countries and sub-regions, while also presenting a broader regional overview to identify achievements and shortcomings. It also highlights cases of good practice and recommendations for the way forward. In particular, this report analyses progress through the lens of two related issues that have gained much greater attention in recent years: equity and inclusion.

The development of the report was co-led by UNESCO Bangkok, the UNESCO Institute for Statistics (UIS), UNICEF East Asia and Pacific Regional Office (EAPRO) and UNICEF Regional Office for South Asia (ROSA). This process was supported by members of technical Peer Review groups as part of the Asia Pacific Regional Network Group on Learning and Education 2030+. These analyses were then complemented by key informant interviews and detailed case studies of inclusion in education. The resulting draft analyses were strengthened through secretariat and technical peer reviews as well as sub-regional validation exercises.

Context

The regional context and development trends have a significant impact on education. When considering progress towards SDG 4 from 2015 to 2020, important trends in political, economic and social development, as well as in demographics, culture, the environment and technology have emerged in the region.

1 50 countries as corresponding to the UNESCO region of the Asia-Pacific

In addition, the COVID-19 pandemic has undeniably had significant implications for education, and its impact must be considered when determining potential courses of action to accelerate progress towards the SDG 4 targets.

An increasing youth population in the region is linked to higher expectations with regard to work opportunities and participation in social and political processes. Women are also increasingly represented in civic activities and in government. However, great variation exists among countries and significant gender inequality remains in many contexts and domains, for instance in youth unemployment where young women may be disadvantaged.

Overall, the region has seen many years of relatively stable and even accelerating economic growth. However, the downturn in economic growth in recent years is likely to further decline in many countries due to the COVID-19 pandemic (ADB, 2020). This is likely to contribute to increased income disparities, with the Gini coefficient, which measures income inequality, having already increased in most countries with available data.

The years from 2015 to 2020 have seen widespread falling birth rates (Firth, 2018) with the exception of the Pacific sub-region which is projected for significant population growth. Another common trend is rapid urbanization, a trend identified in all sub-regions and which is projected to continue in the coming years. These urban areas are likely to see a widening gap between the wealthiest segments of society and the poorest – those living in informal settlements without access to basic services such as sanitation, health care or schools.

The region has the largest number of internet users worldwide, reaching nearly 2.1 billion in 2018 (Statista, 2020b). However, despite this high level of usage in some countries, internet penetration in the region is still below the global average. The region has also seen a considerable increase in smartphone use with the number of users expected to approach 1.81 billion by 2021 (eMarketer, 2017) – representing approximately 40 per cent of the total population of the region. However, of concern is the resulting digital divide both across and within countries, which increases inequality based on location, socioeconomic status, gender, disability and more. Data from Indonesia (Hadi, 2018) indicate that urban households are almost twice as likely to have access to the internet, fixed broadband, computers, or radio as rural households. In South Asia, the mobile ownership rate for women is 65 per cent, compared to 88 per cent for men, with an estimated 207 million women still unconnected in the sub-region (USAID, 2021).

The Asia-Pacific is home to a large number of displaced persons and refugees with 7.7 million displaced due to conflict in 2018. According to UNICEF, two out of five international child migrants were born in Asia alone (UNICEF EAPRO, 2019a). In addition, there is a substantial number of children 'left behind' in their villages by migrating parents to be raised by members of their extended families, usually their grandparents (Zhang, 2019). COVID-19 has prompted significant levels of reverse migration across and within countries, as migrants returned home from abroad or from cities back to their home towns and villages.

As in the rest of the world, the region is struggling with climate change and environmental degradation.² In recent years,

2 These trends will inevitably have an impact on the achievement of many of the SDGs including: Goal 7: Affordable and Clean Energy, Goal 11: Sustainable Cities and Communities, Goal 12: Responsible Consumption and Production, and Goal 13: Climate Action. the region's climate has become harsher, hotter, and more unpredictable. In terms of natural disasters, the region is considered the most disaster-prone area in the world, with powerful super-typhoons in the Philippines, India and Bangladesh (Climate Signals, 2019); inundations in India, China, Singapore and Indonesia (The Jakarta Post, 2020); deadly wildfires in Australia (BBC, 2020a); and rising sea levels threatening countries in Oceania (Salem, 2020). Food insecurity is also expected to rise due to the loss of farmland, overfishing and unpredictable seasons.

The COVID-19 pandemic and the twin shocks of a health emergency and an economic recession are having a significant negative effect on human capital accumulation, development prospects and welfare. The contexts within which people of the Asia-Pacific are having to cope with the pandemic vary considerably, with disparities in living conditions and varying degrees of access to, and quality of, essential services such as health and education. Across the region, vast inequalities between rich and poor also mean the poor face long-term risks far beyond contracting the virus.

Some of the most vulnerable children felt the side-effects of COVID-19 from the moment nationwide lockdowns were put in place to control the spread of the disease. Initially, schools, markets, workshops, farms and factories closed, leaving children and families stranded. The crisis has exposed and exacerbated deep rooted inequalities in societies, as well as the lack of preparedness of government capacity to respond to shocks of such magnitude. Apart from education, social protection systems, if available, have also struggled to identify, target, and distribute emergency relief on a large scale to those most in need. More than a year after the start of the pandemic, the fear and uncertainty continue for many. All of these factors have greatly affected education and learning for children and young people across the region (UNESCO and UNICEF, forthcoming).

SDG 4 Progress

Regional trends in relation to all 10 SDG 4 targets are presented in three groupings. The first covers those most closely related to basic education and its inputs. The second grouping covers those predominantly related to post-basic and adult education, and the

third covers Target 4.5 on equity and inclusion, which is cross-cutting across all targets. Given the scale and variety of contexts within the region, generalizations at the regional level mask large variations at the sub-regional level, while generalizations at the sub-regional level mask large variations at the national level and so on.³

Basic Education











Universal primary and secondary education are at the heart of the Education 2030 agenda. Target 4.1 advocates for free and compulsory education for at least the first nine years of formal education, consisting of primary and lower secondary education. Overall, a large share of children has completed primary education in the past years, but many are yet to complete secondary education. More than 90 per cent of children complete primary education in 10 out of 17 Asia-Pacific countries based on the latest available data, with most countries displaying positive trends. However, only five out of the 17 countries have completion rates higher than 90 per cent in lower secondary education and only two out of 17 have more than 90 per cent of youth completing upper secondary education.

Even when children and young people complete a level of education, they may not have acquired the intended foundational reading and mathematics skills. In many countries, less than 50 per cent of school children are achieving the minimum proficiency levels in reading in the early grades. Furthermore, levels of learning tend to decrease by the time children reach the end

of lower secondary education. For example in Kazakhstan, 98 per cent of children achieve the minimum learning outcomes in reading at the end of primary education, but only 36 per cent of learners at the end of lower secondary education do. The scale of the learning crisis is similar in mathematics, where less than half of children meet minimum proficiency levels at the beginning of primary school in many countries.

Beyond academic skills, national policies and curricula do reflect, to varying degrees, concepts related to sustainable development and global citizenship in the region (Target 4.7). In particular, concepts such as environmental sustainability, good health and well-being, and human rights are widely addressed, indicating a high level of national commitment towards the attainment of knowledge, skills and attitudes related to these concepts. However, topics such as economic sustainability, gender equality, and a culture of peace and non-violence are often not addressed.

³ Each country is strongly encouraged to carry out a similar progress review exercise of the SDG 4. It is particularly useful to gauge the impact of the COVID-19 pandemic and adjust education sector plans, strategies and programmes for achieving the SDG 4 targets. Such reviews can be done as a mid-term review of the SDG4 to accelerate actions towards 2030.

Children's exposure to early learning is crucial for laying the foundations for lifelong learning. Target 4.2 reaffirms the importance of early childhood education in nurturing children's cognitive, social and emotional capabilities that prepare them to participate in primary education and beyond. The region has seen good progress in relation to this target as evidenced by the increasing gross enrolment ratio for pre-primary education over the past years. In Eastern Asia alone, the ratio grew by nine percentage points between 2015 and 2019. However, overall levels remain very low in some sub-regions, especially in Central Asia where only four out of 10 children are enrolled. While all countries in the region have policies that support 1–4 years of pre-primary education, provision is only free and compulsory in seven countries. The period of commitment and the quality of provision also vary considerably in part because provision is often through non state-actors.

Schools in high-income countries are generally well equipped with the adequate services and facilities outlined by Target 4.a, but this is not the case in lower-income countries, especially in primary schools. For example, only 5 per cent of primary schools in Afghanistan have adequate handwashing facilities, a critical limitation in establishing COVID-19 safety

protocols to allow schools to stay open or reopen safely. Despite progress, access to electricity in schools remains relatively low in many countries: only 65 per cent of primary schools in India have electricity, while digital connectivity and computers are only available in 15 per cent of primary and lower secondary schools in Samoa. The share of schools with accessibility features for students with disabilities remains low across all countries in the region, and many children, especially boys, have experienced school bullying. While the number of attacks against students, teachers, and institutions has been on the decrease in past years, violence in education is still prevalent in some countries such as Afghanistan, India and Myanmar.

In line with Target 4.c, a large and increasing proportion of both female and male teachers are trained and qualified at primary and secondary level in the region. However a significant number of countries, such as Lao PDR, the Maldives and Tajikistan, have a severe shortage of qualified teachers in pre-primary education. In other countries, such as Nepal and Pakistan, female teachers are much less likely to be trained than their male peers. While teacher attrition rates are low in basic education, some countries do report relatively high attrition rates in pre-primary education and among male teachers.

Post-basic and adult education



INCREASE THE NUMBER OF PEOPLE WITH RELEVANTS GILL'S FOR





The proportion of youth participating in vocational education is higher than the global average of 5 per cent in most sub-regions, with the exception of Southern Asia where it is only

2 per cent (Target 4.3). Participation in tertiary education remains limited, at approximately 50 per cent, compared to basic education, with a widening gender disparity in tertiary education enrolment in favour of women in Eastern Asia, South-eastern Asia and Oceania. Currently, less than 10 per cent of youth and adults participate in formal and non-formal education and training.

Between 2015 and 2018, Overseas
Development Assistance (ODA) for scholarships increased from US\$381 million to US\$404 million in the Asia-Pacific. Target 4.b calls for increasing the number of scholarships available, particularly for least developed countries, however, only 5 per cent of ODA for scholarships in the region was provided to low-income countries in 2018.

An increasing number of youth and adults, especially in high-income countries, are learning Information and Communication Technology (ICT) skills in the region. However, Target 4.4 remains guite distant as the overall level of ICT and digital skills remains generally low. Less than 5 per cent of youth and adults in lowermiddle-income countries are proficient in finding, downloading, installing, and configuring software compared to 40 to 60 per cent in high-income countries, with persistent gender gaps in favour of men. Such inequalities in ICT skills can have equity implications for governments' attempts to switch to online education platforms, as they may not have the skills required to access online educational content, even if the required hardware and connectivity exist.

Although youth and adult literacy rates have continuously risen across the region over the past years, 27 million youth remain illiterate, of which 95 per cent live in Southern Asia alone (Target 4.6). Within country variation remains significant as people with low socio-economic status are far less likely to achieve proficiency in functional literacy and numeracy skills compared to the national averages across the region.

While there has been some progress towards the targets of SDG 4, this progress has generally been slow and insufficient to achieve SDG 4 by 2030 – even before the impact of COVID-19. Furthermore, progress has been uneven, with rates of progress varying significantly across and within countries. For some population subgroups the 2030 targets have already been met, but for too many the promise of inclusive and equitable quality education and lifelong learning remains extremely distant. Without considerable acceleration, universal access to pre-primary or secondary education, as well as the general provision of high quality education as espoused across SDG 4's targets, are highly unlikely to be met for the majority of the region's population by 2030, especially as the region will also have to address the negative impacts of COVID-19 on drop-outs and learning loss.

Equity and inclusion

Equity and inclusion are cross-cutting threads across all SDG 4 targets,



and are the explicit focus of Target 4.5. Across the region, common and significant barriers to education continue to exist at all levels. Children and young people from rural areas and low-income families are at a disadvantage of accessing and benefiting fully from education. Inequalities due to household economic status and geographical location become more pronounced over the course of the education trajectory. These disparities persist even in the most educationally and economically advanced countries in the region. In Singapore for instance, only 28 students from the poorest households for every 100 students from the richest households achieve the minimum proficiency level in mathematics at the end of lower secondary education.

The impact of location is often compounded by other related barriers such as ethnicity and language, where students who speak the language of instruction and test are generally more likely to achieve minimum proficiency levels in both reading and mathematics.

The region has seen slow but steady progress towards the adoption of national policies which promote the use of the mother tongue language in education. However, there is variation in terms of the extent to which the mother tongue becomes the language of instruction and for initial literacy. For instance whether it is taught from pre-primary through the early grades of primary education, or whether it remains part of the curriculum as a subject that is taught (sometimes as an elective or as a second language) for a few hours per week.

Despite some progress, significant gender disparities in education also persist in the region with the direction and scale of disadvantage varying across countries and aspects of education. More boys are out of school than girls in some countries of South-eastern Asia such as the Philippines, Thailand and Timor-Leste, while more girls are out of school in Southern Asian countries such as Afghanistan, India, Nepal and Pakistan. Girls and women are more likely to achieve minimum learning standards by the end of lower secondary school and are generally more likely to attend tertiary education, while men are more likely to be literate and be enrolled in TVET programmes.

Household income, location and gender are significant barriers to education and the most visible barriers due to better data collection.

But they are not the only ones. Some of the most significant barriers to education – and the children, youth and adults affected by them – are less visible due to a lack of relevant data. Disability is one such barrier, where the combination of a lack of adequate resources and social-stigma greatly reduce education access and quality. In countries such as Indonesia, Kyrgyzstan and Viet Nam, where almost all

persons without disabilities between the ages 15 to 29 have attended school, only 53 per cent, 67 per cent and 63 per cent of persons with disabilities have attended school, respectively.

In the last five years, the number of refugees and Internally Displaced Persons (IDPs) in the region has increased. Although information on levels of education are lacking, reports suggest that their status has often deteriorated (Shaeffer, 2020), and global evidence suggests that levels of access to quality education will be much lower than those of host communities. The number of migrants due to climate and economic reasons is also increasing, and these numbers will likely only increase as more frequent droughts, tropical storms, floods, rising temperatures and sea levels drive people from their traditional homes (UNICEF EAPRO, 2019b). Migrant populations also fluctuate, in numbers and destinations, but it is likely that numbers will have significantly increased due to the economic disruption of the COVID-19 pandemic.

Thematic analysis on equity and inclusion

Too often, those who are excluded suffer the effects of multi-dimensional exclusion. For example, a member of a repressed minority, a remote community, or a refugee camp is more likely to be excluded from education opportunities. This is then exacerbated by other factors such as disabilities and gender.

A thematic analysis of equity and inclusion in relation to SDG 4, which was undertaken by this review, identified common external (wider societal) barriers and internal (education-specific) barriers that prevent excluded children, youth and adults from benefiting from quality education. The most significant external barriers include: (i) Discrimination against difference and diversity with many societies not recognizing or not willing

to accept difference and diversity, leading to persons with disabilities being undercounted, the neglect of minority languages, and stigma against outsiders; (ii) Inadequate policies, legislation and strategies to mitigate exclusion. Even when there is tolerance of diversity and national visions include a focus on equity there is often a lack of affirmative actions and strategies to decrease related inequalities; and (iii) Lack of equity-focused budgeting. In many countries, the additional funds that are needed to reach those currently excluded are not provided in national or local budgets. For instance studies undertaken to estimate the adequacy of economic and social policy responses to COVID-19 in Southern Asia suggest there is inefficiency in targeting those that are the most excluded – often due to a lack of information to identify them.

Internal barriers to inclusion, meaning those within the education sector, often mirror and intensify those in broader society. Education

budgets and their allocation within countries are rarely based on principles of equity and inclusion. In fact, it can be the reverse, with education budgets often prioritizing higher levels of education or underinvesting in marginalized areas, therefore disproportionately benefiting the most advantaged in society. Excluded populations within education are often 'invisible' due to a lack of data, their relatively small size, their often remote location and relatively low level of political influence. Discrimination and neglect can therefore lead to difficulties in entering and passing through the education system, such as through inappropriate admission criteria, unaffordable fees and additional costs, or programmes not suited to a learner's developmental delay or disability, to name only a few.

Educational content and pedagogy are often not supportive of inclusion. Curricula, textbooks, and other learning materials may



under-represent or even ignore a nation's diversity, and in some cases, even promote negative stereotypes of minorities. Teaching methodologies used in the classroom may also reflect elite, majority or urban values, and teachers are often unable or unwilling to provide individualized instruction or remedial support required of learners from vulnerable groups, therefore contributing to increased inequities when it comes to learning outcomes.

Education systems and programmes in the region are often not inclusive in terms of their own workforce: there are usually few teachers or staff with disabilities, women are over-represented overall in the teaching profession, with few male teachers at pre-primary and primary level, but they are under-represented in leadership roles. More generally, there is significant under-representation of ethnic, linguistic and religious minority groups. The education profession, in other words, usually does not represent the diversity found in wider society, which in turn influences learners' perspectives.

As the barriers to inclusion and the achievement of SDG 4 are often highly contextualized, it is necessary to go into more depth to see how countries are implementing education goals in policy and practice. This report presents eleven different case studies showcasing advances and opportunities in equity and inclusion. The case studies highlight the importance of clearly identifying excluded groups, the barriers they face, and the role of data and information in doing so. They also highlight the importance of effective, varied partnerships including marginalized communities and teachers as active stakeholders.

COVID-19 and education

The immediate impact of COVID-19 on education in the region resulted in widespread school closures, these closures have ranged from only a few months such as in Japan and Timor-Leste, to over a year as of early 2021 in the Philippines and Bangladesh. However, even in the countries where schools closed for only a few months, the impact on learning is likely to be hugely significant. The World Bank estimates that globally, COVID-19 could result in a loss of between 0.3 years and 0.9 years of quality schooling and that a school shutdown of 5 months would generate learning losses that have a present value of \$10 trillion (World Bank 2020e). A study of post COVID-19 lockdown learning outcomes in the Netherlands confirms the worst fears of significant and uneven learning losses, with students from less-educated homes suffering learning losses 60 per cent higher than those of their peers (Engzell et al., 2021).

Responses to provide continuity of learning have been met with significant challenges including large digital divides and teachers lacking adequate resources and digital literacy. Governments often lacked the data they needed to identify and target the different marginalized groups. However there have been many examples of positive responses to these challenges, including worksheets being distributed with mid-day meals in India, edutainment broadcasts in Lao PDR, rapid curriculum reform in Bhutan, and blended digital and non-digital learning for children with disabilities in Viet Nam

The unprecedented interruption of learning due to COVID-19 does provide a unique opportunity for change and building back better. One of the keys is to invest in the capacity of teachers to work in partnership with communities and parents to provide alternative and more flexible learning solutions for all

children. A new approach to learning should encourage differentiation in terms of pedagogy, and more autonomous learning with a focus on skills and conceptual understanding. This should extend to the full range of life skills required. Lack of differentiation in the classroom was a critical constraint to realizing inclusive education prior to the COVID-19 pandemic.

Recommendations

Given the range of contexts and challenges that have been further complicated by COVID-19 in relation to the achievement of SDG 4 in the region, an exhaustive and prescriptive list of recommendations is not appropriate. A broad review of progress in relation to SDG 4 lends itself to an equally broad set of recommendations, framed as policy options which decision-makers can select from depending on their own specific context and challenges. While translating recommendations into action can involve difficult choices and trade-offs, it is important that principles of equity and inclusion are applied given our collective commitments to the SDGs.

1. Build education systems that embrace relevance and flexibility, and have equity and learning at their core.

The relatively slow progress in the region in reaching the SDG 4 targets and the generational shock of COVID-19 calls us to reflect upon the intentions of education and the meaning of an education system. Education must capitalize on the possibilities provided by new digital technologies, but it must do so in an effective, progressive and equitable manner, so that all are included and learning. Multiple pathways and flexible modalities of learning will need to be developed to allow all to engage in lifelong learning beyond a physical classroom. However,

it is not just the modalities of learning that must change but also the nature of the learning itself.

Learning must mean providing all learners with 21st century skills and the transferable competencies necessary to prosper in, and shape a world of greater environmental and economic uncertainty. Curricula will need to be competency-based, and mainstream wide-ranging issues from climate change, risk mitigation, social cohesion and peacebuilding, to inclusion and digital skills. Education systems themselves must also change, becoming more flexible and resilient as dynamic networks of inclusive connected pathways and learning hubs.

2. Remove barriers that hinder equity, inclusion and quality in education.

Far too many children, youth and adults from excluded groups in the Asia-Pacific such as persons living with disabilities, those with low socio-economic status, linguistic and ethnic minorities, are being denied their right to quality education. The barriers to education they face range from legal, to policy, to infrastructure, as well as socio-cultural, and they must be removed. Some barriers may be expensive, such as fee-free education, and some others may only be fully achieved in the longer term such as changing attitudes to persons with disabilities. A rights-based approach to the progressive realization of opportunities can be employed leading to the full realization of education rights for all learners. Levels of exclusion and the number of people affected are likely to grow due to the impact of COVID-19. This will require additional and complementary social protective system level changes, as well as measures including health and nutrition interventions in schools such as school feeding in order to address them.

3. Ensure an adequate and equitable supply of motivated, supported, qualified, resourced and empowered teachers.

The COVID-19 pandemic has emphasized the crucial and multi-faceted role teachers play in the lives of their students and in the functioning of our societies and how many different tools and modes of communication they are now expected to master simultaneously. Pre COVID-19, significant teacher training reforms, including competency-based education with a stronger focus on skills building, digital education, and a more student-centred pedagogy, were already needed to address the learning crisis and the changing nature of education.

In response to COVID-19, teachers will need additional support to provide adequate

remediation and continuity of learning.
They will also have to be supported to play a greater counselling and communications role in detecting mental health issues, providing psychosocial support, and communicating with learners and their parents about safety and risk mitigation protocols.

Teachers need to be at the centre of all education reforms starting from the design phase, and they must be adequately supported and resourced to carry out their expected roles. It is also crucial that the available teaching force is equitably allocated and managed to ensure that the most disadvantaged learners are prioritized.

4. Increase and ensure the equitable supply of suitable infrastructure, physical and digital resources, from basic necessities to digital technologies.



The level of physical resources in schools starting with the most basic of necessities such as electricity and WASH facilities must be improved, and all learning locations should facilitate persons with disabilities to fully participate in learning. The COVID-19 pandemic has shined a light on the great potential of digital technologies and remote learning. Its expansion should be carefully managed to ensure that learning is the focus of such technologies and that they are designed and used to reduce inequalities rather than increase them. The risk of exacerbating already existing inequalities through digital learning must be pro-actively addressed. The pandemic has also shown the ongoing importance of no-tech and low-tech resources and approaches in providing all learners with quality education and this must continue to receive adequate investment in the short term. Otherwise a generation could be lost chasing aspirations which will only benefit future generations.

5. Strengthen monitoring and use of data on the levels of learning and the conditions for learning.

There are widespread data gaps in relation to SDG 4, especially with regard to the education of marginalized groups and on the levels of learning outcomes. What little information exists suggests a widespread lack of learning and a pressing need to measure learning more regularly and effectively, starting at the classroom level with greater use of formative assessments. The assessment systems must be fit for purpose, meaning that they should provide planners and decision-makers with regular, timely and real-time information that facilitates the targeting of schools and teachers for additional support. The assessment and wider data management systems must also ensure that no learners are invisible. More comprehensive

and better quality disaggregated data is needed, especially in relation to the most marginalised groups, utilizing the Washington Group and UNICEF Module on Child Functioning for children with disabilities.

Setting intermediate SDG 4 benchmarks, especially for a reduced number of key indicators, through a transparent technical process supported by strong political commitment, would help renew emphasis on achieving SDG 4 and would be a first step towards improving in-country monitoring and reporting capacity.

6. Increase investment in education and ensure efficient and equitable resource allocation, as well as accountability in expenditures, through a progressive universalism approach.

The global commitment to allocate at least 4–6 per cent of Gross Domestic Product or at least 15-20 per cent of total public expenditure to education must be met. This is the minimum. In the short and medium term, difficult financial trade-offs will be faced, and priority should be given to those levels of education that benefit the most people and the most disadvantaged such as early childhood or vocational training. Progressive universalism can be a guiding principle of this investment, ensuring that public investments are channelled to the earliest levels of education first. Failing to invest now in education, in remedial classes, improved school facilities and teaching capacity, will only lead to increased costs and reduced social development and economic growth in the future.

7. Strengthen and broaden partnerships across all actors in education from parents and caregivers, to international organizations and the private sector.

Partnerships in education should be broadened and deepened to include young people, civil society, academia, media, the private sector and more. The private sector has a crucial role and vested interest in improving levels of 21st century skills, not least those affecting employability and productivity. COVID-19 has highlighted the crucial role parents and caregivers have to play in education and in supporting teachers. This should be built upon in the short and medium term, especially in nurturing the early years and in rural communities where social distancing applies and multiple shifts need to be run. Investments must be made in establishing and coordinating effective partnerships as the region seeks to recover from COVID-19. Such investments, if made now, have the potential for greater efficiency and cost-saving in the future as a wider spectrum of actors bring their expertise and resources to the achievement of SDG 4.

Conclusion: a call to action

COVID-19 represents one of the greatest challenges to organized learning in history, and yet it has also taught us many vital lessons about organized learning: it has revealed the importance of schools and education to societies, and children and youth as social beings. In some contexts it has demonstrated the robustness and flexibility of education systems and the professionals within them, in others it has exposed weaknesses and fragility. It has also illustrated the vital contributions that partners outside of the traditional education system can play, and the crucial role education has in potentially making individuals, wider societies and the planet safer.

There are already a number of ongoing and planned initiatives and activities that can provide support to countries in enhancing monitoring and progress towards SDG 4.

Through the Reimagine Education initiative, UNICEF and its partners including ITU and Microsoft, are working to narrow the digital divide and ensure equitable access to high quality digital learning. The implications of universal access to the Internet are huge, not only in terms of schools but also for life-long learning and connecting even the most remote communities across different sectors.

Under the UNESCO and UNICEE co-chaired Asia-Pacific Regional Network Group on Learning and Education 2030+, two new sub-groups are being created to address immediate priority needs for education in the region: Digital Transformation in Education, co-led by UNICEF and ITU, and School Health and Nutrition, co-led by UNICEF and UNESCO. These groups, together with the already established groups on Multilingual Education, Disability Inclusive Education, among others, will work to improve the level of knowledge of what is being done and what has worked in these areas, while also promoting the application of this knowledge throughout the region. Work is already ongoing to enhance the monitoring of progress towards equitable quality education, and in the development of response and recovery plans that adequately address effective distance learning and apply a comprehensive gender responsive approach.

In many ways, the pandemic and its response have guided the way forward for education and learning in the region, with the potential to overcome the all too slow progress towards SDG 4 over the past five years. A future where schools are open and children are learning is of utmost national importance. It is a future where leaders prioritize and invest in all citizens' learning, where all barriers to education are overcome and no learner is excluded. Now is the time for action – a unique moment in history when we can reimagine education and learning to build back better.

INTRODUCTION

THE ADOPTION of Agenda 2030 saw governments across the world commit to an ambitious, transformative and universal global agenda for sustainable development. Sustainable Development Goal (SDG) 4, in 2015 marked a new era for education. This ambitious new goal, launched with the adoption of the Incheon Declaration (Education 2030) set a universal, holistic and transformative vision for SDG 4. With the mission to ensure 'inclusive and equitable quality education and promote lifelong learning opportunities for all', it aimed to address future challenges in education through seven targets and three means of implementation.

In contrast to previous global education agendas, Education 2030 places a unique emphasis on the quality of education and lifelong learning, while also seeing education as part of the overall global development agenda.

Five years after the adoption of SDG 4, the Asia-Pacific region is not on track to meet its commitments, requiring an urgent need for Member States to renew their efforts. This five-year progress review therefore aims to take stock of progress made in the region, as well as propose the best way forward in working towards SDG 4 and its ten targets.

Rationale for the SDG 4 Progress Review⁴

The Asia-Pacific Regional Network Group on Learning and Education 2030+ was established to lead the implementation and progress review of SDG 4. Co-chaired by UNESCO Bangkok and UNICEF, it also brings together sub-regional organizations, as well as a network of national SDG 4 coordinators as a crucial mechanism for implementing and monitoring SDG 4 in the region. As part of a Regional Roadmap prepared to serve as a strategic guide for Member States (UNESCO Bangkok, 2018a), the first review of SDG 4 is highlighted as one of its key regional milestones (UNESCO, 2020b).

This report offers the first regional and sub-regional progress review towards SDG 4 and each of the ten targets. In particular, it analyses progress through the lens of two issues that have gained much greater attention in recent years: equity and inclusion.⁵ Experience from the previous Education for All (EFA) and Millennium Development Goal (MDG) agendas showed that while considerable progress was made, many children, young people, and adults, were still not included in the education system, and if they were, they were not learning.

Equity and Inclusion in Education – why are they important in this review?

This review will analyse progress towards SDG 4 in the Asia-Pacific through the lens of equity and inclusion, which have become crucial issues in discourse on development outcomes leading up to 2030. Considerable progress can be observed with regard to greater equity in the region. For example, overall gender parity has increased, extreme poverty has been reduced, and there has been improved access to social services. However current assessments of progress towards the SDGs point to two main concerns. First, SDG 4 and its targets are not likely to be reached, and where progress has been made, it has not been equitably distributed. Second, groups that were vulnerable and marginalized before the development process either continue to be excluded, or have fallen even further behind.

⁴ For a more detailed rationale for this review and an explanation of its methodology, see Annex 1.

⁵ Note the 2020 Global Education Monitoring Report *Inclusion and Education: All Means All.*

The achievement of the SDGs – including SDG 4 – requires that even more attention be paid to equity and inclusion.

There are a number of challenges, however, as the world becomes less equitable and inclusive each day, especially in the Asia-Pacific region (Kasper-Claridge, 2018). A similar situation can be found in the Asia-Pacific, where social and economic disparities are increasing, food security is becoming more tenuous, the digital divide is growing, and climate change is widening the gap between those who have access to water and arable land and those who do not. While social services such as education, health, water and shelter, have become more available, they often fail to reach the most marginalized.

Equity and inclusion are crucial dimensions to achieving progress towards SDG 4, both in terms of its specific targets, but also in terms of broader sustainable development and societal change as follows:

- Education is a fundamental human right and forms the basis of equity and inclusion (Tomasevski, 2004). This right has been stipulated in many international conventions and declarations⁶ all of which focus on an individual's right to develop to their full potential without discrimination based on any form of 'difference'.
- More equitable national economic, social and political development, based on the assumption that education leads to greater individual and social development, to ensure a human resource base able to participate more actively, effectively, and responsibly in the development process.

Equity in education: access and the quality of education

Equity in education is centred on the human rights principles of inclusion, social justice, and fairness. An equity-focused approach to education requires inclusive education policies, systems, and schools,⁷ targeted to reach all learners – children, young people, and adults – who have never been to school, who are not currently in school, or who are in school but are not learning.⁸ There are two important factors to consider with regard to equity in education: access and quality.

Equity in access to education requires enough places in affordable, accessible early childhood development programmes and schools, equitable access to a desk in a classroom. However learners do not access education with the same prior experience, knowledge, skills and abilities. Some may

[•] Social cohesion, inclusion, resilience and peace achieved by effectively educating learners on how to live together, especially in a region as diverse as the Asia-Pacific where an understanding of others is essential to eliminate the causes of discrimination and conflict, while promoting the behaviours and attitudes which welcome and celebrate diversity and pluralism.

⁶ These include the Universal Declaration of Human Rights, the Convention on the Rights of the Child, the Convention on the Elimination of All Forms of Discrimination Against Women, the Convention of the Rights of Persons with Disabilities.

⁷ Unless otherwise noted, any reference to 'schools' also includes early childhood development programmes (including pre-primary schools and kindergartens), higher education institutions, TVET centres, non-formal learning centres, etc.

⁸ For a more detailed discussion about issues surrounding out-of-school children, see the UNICEF report <u>Learning Against All Odds: Evidence and Policies to Support All Out-of-School Children and Adolescents in East Asia and Pacific.</u>

enrol in poor health, malnourished, or with disabilities, while others may have lacked adequate stimulation as young children. Others may come from families affected by poverty and displacement, or from marginalized groups.

Equity in the quality of the education

requires an adequate learning environment equipped with sufficient books and materials, and school facilities that are healthy, safe and protective. Qualified teachers also play a key role in promoting equity through employing teaching and learning processes that are learner-centred, gender and culturally-responsive, as well as relevant to children's learning needs. Such an approach would be geared at ensuring equity in learning outcomes, in order to improve completion and transition rates.

Inclusion: in the classroom and in learning

This review employs UNESCO's definition of inclusive education, which is 'a process that helps to overcome barriers limiting the presence, participation and achievement of learners' (UNESCO, 2017). It is a process that leads to both sustained **physical inclusion in the classroom** (through access, enrolment, attendance, progression and completion) as well as inclusion in learning (participation and achievement).

Inclusion in education intends to work at various levels: 1) to reach out to learners of all backgrounds to embrace diversity and differences, 2) enhance the quality and relevance of education for all, 3) ensuring learners enter the system at the mandated age and progress within the allocated timeframe, 4) promote equity in opportunities to participate in processes of economic, social and political development.

Nonetheless, inclusion remains a significant challenge, in particular for the three following groups:

- Those who are not currently enrolled will either never enrol or will enter the education system late, either due to their geographic location, legal status, socio-economic background or identity.
- Those who dropped out of the system in the early grades without achieving basic literacy, numeracy and other skills. Or those who did not transition to secondary education or beyond, resulting in limited access to skills and certifications required for social mobility (UNICEF, 2015).
- Those attending class but not learning, either due to their background, status or identity, curricula and pedagogy that are not inclusive, culturally-relevant, or reflective of learners' life experiences, teaching and learning approaches that consider individual needs, school leaders that foster an inclusive school environment.

Report Structure

This report will review progress towards SDG 4 in the Asia-Pacific region, with equity and inclusion in mind as a framework for analysis. It will identify the regional context and trends, challenges, but also opportunities for countries in the region with regard to achieving all ten targets by 2030. Overall, this report is composed of a policy analysis, a statistical analysis, as well as case studies of best practices in implementing the different SDG 4 targets in practice.

First, it will examine the Asia-Pacific context and identify eight significant trends that have had implications for education, and therefore, for achieving SDG 4. These include political developments, economic developments, social development and demographic trends, as well as climatic and environmental trends, cultural and technological developments, and the impact of COVID-19.

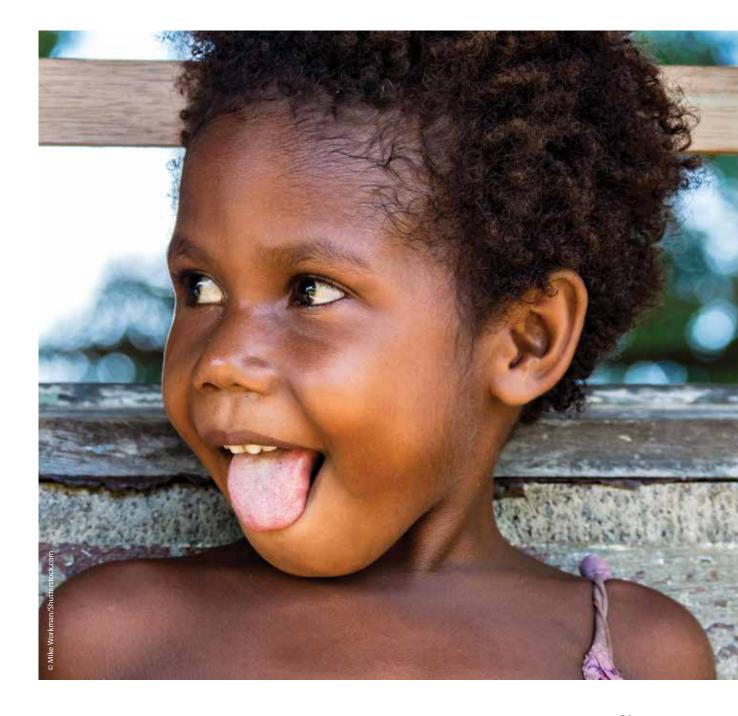
Second, this review will conduct a statistical data analysis of SDG 4 focusing on each of the ten targets while drawing from the latest available data at national and sub-regional levels.

Third, it will consider a thematic analysis through the lens of equity and inclusion that will identify challenges, opportunities and cross-cutting issues.

Fourth, case studies of innovative practices and solutions for implementing SDG 4

will be presented. They will each focus on different targets, countries and themes, while considering key success factors, as well as potential for sustainability and adaptability to other contexts.

Finally, this five-year progress review will end with policy recommendations aimed at guiding policy-makers and education stakeholders.



CONTEXT

What regional development trends have significant implications for education?

THE REGIONAL CONTEXT and development trends have a significant impact on education. In order to assess progress towards the expansion and reform of education systems, it is necessary to analyse the broader context that ultimately affects how the SDG 4 targets are implemented. When considering progress towards SDG 4 from 2015 to 2020, important trends in political, economic and social development, as well as in demographics, culture, the environment and technology have emerged in the Asia-Pacific region. In addition, the COVID-19 crisis has undeniably had significant implications for education. Its impact must be factored when determining courses of action to accelerate progress towards the SDG 4 targets, as the contexts for implementation have changed dramatically.

This chapter seeks to understand emerging development trends in the Asia-Pacific over the last five years that have had a significant impact on the achievement of SDG 4. Overall, while the region has seen progress in areas such as political and economic development, significant challenges remain to be overcome.

Trends in Political Development⁹

SDG 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.

An increasing youth population in the region is linked to higher expectations with regard to work opportunities and participation in social and political processes. Women are also increasingly represented in civic activities and in government. However, great variation exists among countries, and significant gender inequality remains in many contexts and domains such as in youth unemployment where young women may be disadvantaged.

A global trend toward more **authoritarian governance** and a growth in exclusionary and discriminatory processes. Some global political trends are also mirrored in the Asia-Pacific region. For example, the 'democratic recession' of liberal democracies towards more authoritarian governance structures is visible in several countries of the region (The Economist, 2019). This can result in curtailed freedom of speech, internet control and restrictions on civil society organizations, which in turn can have a negative impact on the support given to educational efforts at many levels.

However, this shift away from liberal democracies has seen an increase in political participation and activism, especially by youth in the region (UNDP and UNDESA, 2013). As a result, Civil Society Organizations (CSOs), Community-based Organizations (CBOs), citizen-led accountability mechanisms and even opposition political parties have led to a rise in political awareness and participation of the countries' citizens, which in turn can lead to a culture of peace, non-violence and global citizenship, as reflected in Target 4.7.

The main trends with regard to political development include the threat of weakened democracy, the rise of political participation and popular movements, with specific **implications for education** linking to SDG 4.7:

⁹ This section has been prepared within the context of SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

- Policies focusing on SDG 4.7 will be supported in countries with a stronger sense of political participation and a more liberal governance structure.
- Curricula reflecting the concepts of democracy and human rights, global citizenship education, peace and nonviolence and diversity are more likely to be implemented in countries with a more open, free, socially cohesive and inclusive societies.
- Teachers capable of developing competencies and teaching methodologies to deliver SDG 4.7 concepts such as human rights, peace and diversity.
- Learning assessments that evaluate competencies and concepts related to SDG 4.7 will ensure that they are valued, respected and appreciated to become more universal.

Trends in Demographics¹⁰

SDG 4.3

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

SDG 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.

Overall, the Asia-Pacific has seen many years of relatively stable and even accelerating **economic growth**. While the COVID-19 pandemic has caused significant setbacks, there are additional aspects with regard to the sustainability of economic development to be considered. More specifically, regional declines, economic disparities and a decrease in youth labour force participation all have an impact on Targets 4.3 and 4.4.

The region's overall economic growth is still pointing upwards, however it has decreased in recent years and is likely to further decline in many countries due to the COVID-19 pandemic (ADB, 2020). This, in turn, contributes to **increased income disparities**. The Gini coefficient, which measures income inequality, has risen for most countries with available data. Between 2015 and 2020, for example, Malaysia, the Philippines, the Islamic Republic of Iran and China all saw their Gini coefficient rise. Only Indonesia and Pakistan, among the selected countries in the table below, show a modest improvement.¹²

On top of these challenges, youth labour force participation data for the Asia-Pacific show that, as a result of the 'youth bulge' in the region, the **number of youth is increasing much faster than the number of available jobs** (ILO, 2020a). This will make it harder to achieve SDG 4.3 and 4.4 by 2030, since equal access to education, as well as the capacity of education systems relative to the youth population, are hampered.

¹⁰ This section has been prepared within the context of SDG 17: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels; SDG 10: Reduce inequality within and among countries, and SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

¹¹ In economics, the Gini coefficient, sometimes called the Gini index or Gini ratio, is a measure of statistical dispersion intended to represent the income or wealth distribution of a nation's residents and is the most commonly used measurement of inequality. 0 is total equality, 1 is total inequality.

¹² Countries were selected from sources including the World Population Review and the Global Economy to demonstrate those on either end of the Gini coefficient scale.

Table 1. Gini income inequality index for 2015 and 2020 in selected countries

Country	2015	2020
Malaysia	41.0	46.2
Philippines	40.1	44.4
Indonesia	39.7	36.8
Iran, Islamic Republic	39.5	44.5
China	38.6	46.5
Myanmar	38.1	n/a
Pakistan	33.5	30.7

Source: World Population Review (2020)

Table 2. Youth (aged 15-24) labour force participation and employment to population ratio (%)

Region	Youth Labour Force Participation Rate		Youth Employment Population Ratio (E	
	1999	2019	1999	2019
Central and West Asia	46.4	43	37.7	35.4
South-East Asia and the Pacific	57.6	47.4	51.5	42
Southern Asia	44.9	31.6	38.1	25.7
Eastern Asia	67	45.2	62.2	40.8

Sources: ILO (2020a).

The main trends with regard to economic development include **widening disparities** in many countries, lower transition rates between education levels and in youth employment (especially for young women), and the neglect of governments towards TVET. The following **implications for education** can be identified with regard to SDG 4.3 and 4.4:

- Low-quality and poorly aligned vocational and technical training.
- Existing training often does not receive formal recognition due to a lack of predefined systems for accreditation.
- Changes in the labour market will render many jobs irrelevant in the future.
- Inequity with regard to female participation in the labour market.
- Labour migration to other countries, including outside the region.

Trends in Social Development¹³

SDG 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.

SDG 4.2

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

SDG 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.

¹³ This section has been prepared within the context of SDG 3: Ensure healthy lives and promote well-being for all at all ages.

Table 3. Health expenditure as percentage of GDP (2015–2017)

Country	2015	2017	Change
East Asia and Pacific*	4.70	4.91	0.21
East Asia and Pacific	6.49	6.65	0.16
South Asia	3.51	3.46	-0.05
Pacific island small states	5.16	5.00	-0.16

Source: WHO (2017)

Note: * excluding high income countries

Social development depends on social services such as education, health and social welfare. In the Asia-Pacific region, national budgets allocated to social development have grown slightly in some countries. In addition, a more inter-sectoral collaboration and integrated approach, such as in the Nurturing Care Framework (WHO et al., 2018), have been achieved. Health expenditures are also rising in the region, which in turn will have a positive effect on the implementation of SDG 4 by allowing children to benefit from education rather than focusing on health issues.

Similarly, the **percentage of total government expenditure on education** has increased in Afghanistan, Sri Lanka, and Kazakhstan (UIS, Nd.)¹⁴ However, in some other countries, this has stalled or even decreased.

In East Asia and the Pacific, there has been an increase in the current health expenditure as a per cent of GDP (Table 3), however this trend appears less promising in other sub-regions.

Few of the increases that have occurred, however, represent the kind of additional budget that will likely be needed to achieve the SDG targets related to health and education, which remain essential for enhanced social development.

The main trends with regard to social development include slight increases in government budgets for health and education in some Asia-Pacific countries, with the following **implications for education** with regard to SDG 4.1, 4.2 and 4.a:

- Budgets for health and education remain too low in most Asia-Pacific countries.
- Decreasing budgets make the goal of free, equitable and high-quality education much harder to achieve.
- In light of COVID-19, social development might be particularly affected due to high infection rates, low health expenditures and a lacking social welfare system.

Trends in Cultural Development¹⁵

SDG 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.

Indicator 4.5.2

Percentage of students in primary education whose first or home language is the language of instruction.

¹⁴ Note that these government expenditures on education are complemented. In many cases up to a considerable percentage of a family's income – is also spent on education – both formal and unofficial and the private tutoring (shadow education) common in many countries.

^{15 &#}x27;Culture' is defined here as 'the characteristics and knowledge of a particular group of people, encompassing language, religion, cuisine, social habits, music and arts', with a special focus on language and the cultural manifestations transmitted by this language (What is Culture, Live Science, July 2017). Culture in terms of values, norms, behaviours and attitudes are discussed to some extent in the section on social trends.

Table 4. Current status of languages in the Asia-Pacific

Region	Institutional	Developing	Vigorous	In Trouble	Dying	Total
East Asia and Pacific*	5	1	2	4	1	13
East Asia and Pacific	19	33	84	124	34	294
South Asia	76	192	349	520	112	1,249
Pacific island small states	74	120	200	161	19	574
Oceania	38	354	347	358	226	1,323
Total	212	700	982	1,167	392	3,453

Source: Ethnologue (2020)

The Asia-Pacific is the most diverse region in the world, home to a multitude of religions (Hinduism, Islam, Buddhism, and Christianity – Orthodox, Catholic and Protestant), political dominations and colonial heritage (French, Dutch, English, Russian and Portuguese), as well as ethnicity and language with almost 3,500 languages in the region – half of the world's total (Croissant et al., 2009). With such diversity, the main focus with regard to cultural development and education is the status of the mother tongue or home languages in comparison to national and international languages.

One of the major trends in terms of culture is a decline in the diversity of existing languages and therefore in the cultures that they carry. While English is becoming the major global language in the region, many local languages are dying out. The 45 per cent of total languages in the Asia-Pacific are considered in trouble or dying. The extinction of a language also brings with it the cultural loss of literature, heritage, history, traditions, ecological knowledge, art, music and other elements of culture that have to be considered. Table 5 presents the current status of languages in the Asia-Pacific, by sub-region.

One of the reasons for this decline is the increasingly important role played by what are considered **'dominant' languages**. These languages often replace the mother tongue

both officially and unofficially through family and community discourse. This process is accelerated by the globalization of English (Abdalgane, 2020), which remains the foreign language of choice in most of the Asia-Pacific. The rapid growth of international media at the macro-level and social media at the individual level has only fuelled English as a 'dominant' language in the region.

The main trends with regard to cultural development in the region include the decline of linguistic diversity and an increasing of 'dominant' languages such as English, with implications for education linking to SDG 4.5 (and more specifically, indicator 4.5.2):

- Develop policies for promoting MTB-MLE.
- Encouraging or at least permitting mother tongue languages as a subject (i.e. as a second language) or using as part of local content curriculum.
- Assessing the impact of government decisions with regard to the age at which English or other 'dominant' languages are taught and in which form.

Trends in Demographics

SDG 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 childrer in vulnerable situations (including those in conflict situations).

Demographic trends¹⁶ in the Asia-Pacific region have a great impact on education systems and the achievement of all SDG 4 targets. Current challenges such as population growth, an increase in displaced populations and an increase in the urban population, often force governments to make difficult decisions with regard to the total budget allocated to education and its sub-sectors. These decisions have an important impact on the amount of effort needed and devoted to each of the SDG 4 targets, of which SDG 4.5 is particularly urgent in the region.

The years from 2015 to 2020 have seen a **falling birth rate** across all sub-regions with available data (Firth, 2018). This applies to Central, Eastern, South-eastern and Southern Asia. The population in the Pacific, on the other hand, is forecast to grow from 11 million to 17.7 million or more than 60 per cent by 2050, mostly in just four countries: Vanuatu, Kiribati, the Solomon Islands, and Papua New Guinea (UNFPA, 2014).

Of notable significance are trends in age dependency ratios and age pyramids across the region. As reflected in Table 4, **age dependency ratios** (the percentage of the total population that is of working age (i.e. 15–64 years old), three sub-regions – Southern Asia, Oceania, and South-eastern Asia – have all seen decreases in this ratio between 2010–2016. The largest decrease is observed in Southern Asia, a trend largely reflective of continuing population growth.

Another trend in the region is that the urban population is surpassing the rural population. In 2020, the ratio became 51:49 (Worldometer, 2020) in favour of urbanization. This trend of rapid urbanization in all subregions of the Asia-Pacific is projected to continue in the coming years to bring unprecedented demographic, economic, and social changes.¹⁷ At the same time, these areas will likely see a widening gap between the wealthiest segments of society and the poorest – those living in informal settlements without access to basic services such as sanitation, health care or schools. Many communities in rural and remote locations continue to struggle with access to education, often as a result of distance or isolation.

The demographics of **refugees and internally displaced persons (IDPs)** also need to be considered at a regional level. The number of persons displaced by civil conflict in the

Table 5. Age dependency ratios by sub-region

Region	2010	2016	Change
Southern Asia	59.84	54.77	-5.07
Central Asia	47.95	48.92	0.97
Oceania	58.76	57.62	-1.14
Eastern Asia	39.63	43.10	3.47
South-eastern Asia	53.48	52.38	-1.11

Source: World Bank (2019)

¹⁶ This section was prepared within the context of SDG Goal 3: Ensure healthy lives and promote well-being for all at all ages.

¹⁷ SDG 11 looks in depth at urban development, cities and communities.

Asia-Pacific region totalled 7.7 million in 2018, including 3.5 million refugees, 1.9 million internally displaced persons and 1.4 million stateless persons (IOM, 2019). According to UNICEF, two out of five international child migrants were born in Asia alone (UNICEF EAPRO, 2019a). This trend often complicates access to education, especially with regard to stigma and linguistic differences. Also, there is a substantial number of children 'left behind' in their villages by migrating parents to be raised by members of their extended families, usually their grandparents (Zhang, 2019). COVID-19 has prompted significant levels of reverse migration across and within countries, as migrants returned home from abroad or from cities back to their towns and villages (World Bank, 2020a).

The main trends with regard to demographic development include continuous population growth despite a falling birth rate, an increase in urban population, and an increase in IDPs, with implications for education relating to SDG 4.5:

- Lower demand for pre-primary and primary education due to the decreasing birth rate.
- Reduction of the teacher workforce in some countries.
- Increased demand for lifelong learning and future-proof jobs.
- Increased demand for high-quality schools in urban environments.
- Considerable and complex challenges for migrant and refugee children.



Trends in Climate Change and the Environment

SDG 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.

As in the rest of the world, the Asia-Pacific region is struggling with **climate change** and environmental degradation.¹⁸ In recent years, the region's climate has become harsher, hotter, and more unpredictable, with pollution and a degraded environment as an additional challenge. These factors impact the achievement of SDG 4, requiring special consideration of the availability of schools and ECD programmes. They will likely also impact the continuity of good quality learning with a decrease in participation and achievement among learners at all levels of education.

In terms of **natural disasters**, the Asia-Pacific region is considered the most disaster-prone area in the world, with frequently occurring earthquakes, tsunamis, tropical storms, flooding, landslides and volcanic eruptions affecting millions of people every year (OCHA, 2017). Examples include powerful super-typhoons in the Philippines, India and Bangladesh (Climate Signals, 2019); inundations in India, China, Singapore and Indonesia (The Jakarta Post, 2020); deadly wildfires in Australia (BBC, 2020a); and rising sea levels threatening countries in Oceania (Salem, 2020). These life-or-death situations have significant implications for and disrupt education.

¹⁸ These trends will inevitably have an impact on the achievement of many of the SDGs including: Goal 7: Affordable and Clean Energy, Goal 11: Sustainable Cities and Communities, Goal 12: Responsible Consumption and Production, and Goal 13: Climate Action.

The ongoing threat posed by **environmental degradation** in the Asia-Pacific also continues to be a concern. Food insecurity is expected to rise due to the loss of farmland, overfishing and unpredictable seasons. In addition, the increase in pollution that comes with increased urbanization is a danger to large parts of the population, particularly in India, China, Pakistan, and Bangladesh (Hicks, 2019). The World Health Organization (WHO) estimates that air pollution causes approximately seven million deaths of people per year worldwide (WHO, Nd).

The main trends with regard to climate change include natural disasters and environmental degradation, in particular dangerous levels of air pollution, with **implications for education** linking to SDG 4.5:

- Participation and achievement of children, adolescents, youth, and adults in both formal and non-formal education and training will be reduced.
- Increase in migrant children needing to be educated, resulting in a greater strain on areas already struggling with limited resources for education.
- Increased poverty and the greater chance of affected learners not returning to school, as well as greater psychological stress.
- Less clean water and adequate food for school programmes.
- Education infrastructure and school buildings are at risk of destruction, damage or repurposing.
- Need for Education for Sustainable Development.

Trends in Technological Development

SDG 4.1

Proportion of youth and adults with ICT skills

The role of technology in education has become critically important. Although increasingly complex technologies have been developed (both low-tech and high-tech) over the last few decades, they have been largely supportive of classroom interaction. As a result of the 2020 COVID-19 pandemic, distance and hybrid education models have mushroomed. This trend has greatly impacted the Asia-Pacific and the world in general, as has internet connectivity, online teaching and an increase in smartphone use.

The Asia-Pacific region has the **largest number** of internet users worldwide, reaching nearly 2.1 billion in 2018. With over 560 million internet users, India is the second largest online market in the world, ranked only behind China (Statista, 2020a). However, despite this increase in usage in some countries, internet penetration in the region is still below the global average (Statista, 2020b). On top of that, there is a large digital divide in the region. Data from Indonesia (Hadi, 2018) indicate that urban households are almost twice as likely to have access to the internet, fixed broadband, computers, or radio than rural households. This suggests evidence of an urban-rural (and most likely rich-poor) digital divide.

Technological advances have led to an increase in online courses (Xinhua, 2018), a trend only accelerated by the COVID-19 pandemic. However, this can only be considered as progress if schools are provided with affordable electricity and internet access. In addition, both teachers and learners need affordable devices to be able to access eLearning solutions.

This calls for improved **digital literacy**, as expressed by indicator 4.4.1. Indeed, the potential of digital literacy calls for teachers, students and others to effectively use and apply new technologies to strengthen learning. Within the context of the COVID-19 pandemic, digital literacy could therefore improve learning, facilitate catch-up programmes and explore new pedagogies.

Finally, the region has seen a considerable increase in smartphone use. There were 1.33 billion smartphone users in the Asia-Pacific in 2017, an 11.8 per cent gain over 2016. By 2021, the number of users will approach 1.81 billion (eMarketer, 2017) - approximately 40 per cent of the total population of the region. However, data on internet and smartphone penetration do not tell the whole story with regard to trends in technological development. Of concern is the resulting digital divide both across and within countries, which only increases inequality and can lead to exclusion. In South Asia, the mobile ownership rate for women is 65 per cent, compared to 88 per cent for men, representing a 23 percentage point gender gap, and there are still an estimated 207 million unconnected women in the subregion (USAID, 2021).

The main trends with regard to technological development include a large number of internet users, an increase in online learning and smartphone use, but also growing concerns of a digital divide. **Implications for education** linking to SDG 4.1 are presented as follows:

- Countries with more developed technology resources will likely have more advanced and higher quality education in the next years.
- Any increase in technological development will also lead to an increase in the digital divide.

- Despite its positive connotations, technological development has a potential for excluding poorer, remote and rural populations.
- There is a need to develop more no-tech and low-tech modalities of learning to reach these groups and allow for accessibility (i.e. through television, radio, SMS/mobilebased learning, and printed learning materials such as home study packs).
- Need for investments in digital learning solutions, blended learning and other technologies.

COVID-19

The COVID-19 pandemic and the twin shocks of a health emergency and an economic recession are having a significant negative effect on human capital accumulation, development prospects and welfare. The health crisis will stop almost 24 million people from escaping poverty in East Asia and the Pacific alone, as estimated by the World Bank (BBC, 2020b). The contexts within which people of the Asia-Pacific are having to cope with the pandemic vary considerably, with disparities in living conditions and varying degrees of access to and quality of essential services such as health and education. Across the region, inequalities between rich and poor mean that the poor face long-term risks far beyond contracting the virus.

Due to the pandemic, some sub-regions such as Southern Asia could experience their worst economic performance in 40 years (World Bank, 2020c). Notably, the pandemic has hit the informal sector particularly hard. In Southern Asia, where the majority of employment is informal labour, ranging from 70 per cent in Sri Lanka to 94 per cent in Nepal, the health and economic vulnerability of informal workers and their families is a serious concern. This group is rarely reached by social assistance services,

putting them particularly at risk (IPCIG, 2020). With this immediate loss of income, the need to prevent families and children from falling through the cracks of nascent social protection systems is imperative. Without swift action, 120 million children in Southern Asia are a risk of falling into poverty within six months (UNICEF, 2020), which would have drastic consequences on school access and participation. Between 10 and 15 million full-time jobs may be lost among youth across 13 countries in the Asia-Pacific in 2020. In Cambodia, Fiji, Nepal, Pakistan, the Philippines and Thailand, youth unemployment rates are expected to reach at least double the 2019 estimates, even in a scenario of short COVID-19 containment.

Some of the most vulnerable children felt the side-effects of COVID-19 from the moment nationwide lockdowns were put in place to control the spread of the disease. Initially, schools, markets, workshops, farms and factories closed, leaving children and families stranded. The crisis has exposed and exacerbated deep rooted inequalities in societies, as well as the lack of preparedness of systems to respond to shocks of such magnitude. Apart from education, social protection systems, if available, have also struggled to identify, target, and distribute emergency relief on a large scale to those most in need. More than a year after the start of the

crisis, the fear and uncertainty continue for many. All of these factors have undoubtedly greatly affected education and learning for children and young people across the region (UNESCO and UNICEF, forthcoming).

The COVID-19 pandemic's impact on the economies of the Asia-Pacific region, and of Southern Asia in particular, should also be seen as an opportunity for much needed reforms of social protection systems, and for state building. To prevent hundreds of millions of people from falling into extreme poverty, governments are forced to review and revise their existing schemes and their targeting. This presents an opportunity to consider the potential benefits of establishing inclusive life cycle protection systems which could potentially range from child relief to old age pension, and cover disability and maternity benefits, poverty relief and unemployment benefits. In some cases, universal child benefits could be considered to lift children and families out of poverty. This would depend on contexts and existing social protection schemes, and the affordability and sustainability of such measures should be weighed against their potential multiplier effect in terms of developing a trusting bond between states and citizens – the much needed 'social contract' which is a crucial step in building more equitable, socially cohesive nations.



Are we on track?

REVIEWING PROGRESS towards SDG 4 over the last five years requires a detailed examination of each of its ten targets and indicators. Systematic monitoring of education forms the very foundation of the Education 2030 Agenda, and is essential for measuring progress and informing policy reforms.

As a starting point of monitoring SDG 4, the Asia-Pacific region previously conducted a baseline assessment of each target, which culminated in the report *Paving the Road to Education: A Target-by-Target Analysis of SDG 4 for Asia and the Pacific published by UNESCO's Asia and the Pacific Regional Bureau for Education* (UNESCO Bangkok, 2018b).

This chapter presents a statistical analysis of key trends for each of the ten SDG 4 targets in 50 Asia-Pacific countries and territories between 2015 and 2020, before the impact of the COVID-19 pandemic. This analysis is based on internationally comparable data that is currently

available from the UNESCO Institute for Statistics (UIS) and other relevant sources.¹⁹

Definitions, methodology, and interpretation of the SDG 4 indicators are based on those stipulated in UIS metadata for the global and thematic indicators (UIS, 2018). For each target the context will first be considered, before conducting a progress assessment, and concluding with key highlights and remaining challenges. In order to ensure that this review monitors progress towards SDG 4 through the lens of equity and inclusion, this chapter also employs disaggregated data wherever possible to identify children, young people, and adults who are at a disadvantage when it comes to accessing quality education.

Given the scale and variety of contexts within the region, generalizations at the regional level mask large variations at the sub-regional level, while generalizations at the sub-regional level mask large variation at the national level.²⁰



¹⁹ The main data source in this analysis is the UIS statistical database unless indicated otherwise.

²⁰ Each country is strongly encouraged to carry out a similar progress review exercise of SDG 4. It is particularly useful to gauge the impact of the COVID-19 pandemic and adjust education sector plans, strategies and programmes for achieving SDG 4 targets. Such reviews can be done as a mid-term review of SDG 4 to accelerate actions towards 2030.



Target 4.1: Primary and Secondary Education

By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

Universal primary and secondary education are at the heart of the Education 2030 agenda. SDG 4 calls for access to quality basic education for all children and young people regardless of their socio-economic circumstances, equipping them with basic literacy and numeracy skills and relevant learning outcomes.

Target 4.1 advocates for free and compulsory education for at least the first nine years of formal education, consisting of primary and lower secondary education. The achievement of universal access remains an important element of this target, with an explicit emphasis placed on equity, as well as on the quality of learning outcomes upon completion of each cycle of education.

While the Asia-Pacific has made considerable progress in increasing access to basic education, ensuring universal access to and completion of basic education remains an unmet goal. Another significant challenge is that for learners who are in school, but are not on track to learn the most basic skills.

Progress Assessment

A large share of children has completed primary education in the past years, but many are yet to complete secondary education.

More children had access to and completed primary education, prior to COVID-19, than ever before. In many parts of the Asia-Pacific, the gross intake ratio for Grade 1 of primary education exceeded 100 per cent in 2018,²¹ while survival rates for the last grade of primary

education stood at above 90 per cent in 2018. This indicates that access to primary education is high, with relatively few children dropping out during the course of primary education.

As displayed in Figure 1, more than 90 per cent of children complete primary education in 10 out of 17 Asia-Pacific countries based on the latest available data. In particular, countries with time-series data such as Afghanistan, Bangladesh, India, Lao PDR, the Philippines and Nepal showed higher primary completion rates, prior to COVID-19, than in the past years.

Nonetheless, young people are still less likely to complete secondary education. Effective transition rates from primary to lower secondary education stood at more than 90 per cent in the Asia-Pacific in 2017.²² This indicates that a high share of students continue their education from primary to lower secondary education. However, only five out of the 17 countries which include Kazakhstan, the Maldives, Mongolia, Tajikistan and Turkmenistan have completion rates higher than 90 per cent in lower secondary education.

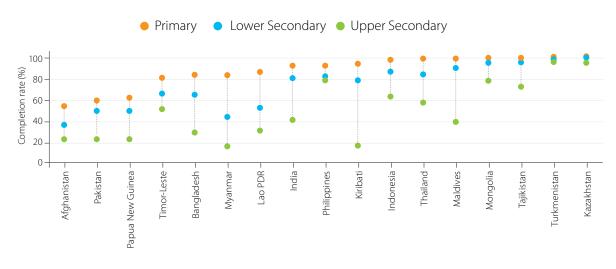
Completion rates are even lower in upper secondary education. Out of 17 countries, only two show more than 90 per cent of youth completing upper secondary education in Kazakhstan and Turkmenistan. The largest gap in the completion rate across all education levels is seen in Kiribati, where 94 per cent of children complete primary education, a rate which drops to 78 per cent at lower secondary and 17 per cent in upper secondary education.

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²¹ Data on survival rates for Oceania are not available.

²² Data on effective transition rates for Oceania are not available

Figure 1. Completion rates for primary, lower secondary, and upper secondary education in selected countries, 2019 or latest



Source: UIS Database (Nd.)

Note: The latest data are available between 2015 and 2019.

Gender disparity in completion rates tends to be more prominent among the poorest households in some countries.

In some countries, gender disparity in completion rates is exacerbated by poverty levels. For instance, in Pakistan and the Philippines (where the latest data are available), girls and boys from the richest households almost equally complete primary to upper secondary education. However, gender inequality is prominent among those from the poorest households. In Pakistan, boys from the lowest-earning family are more likely to complete primary to upper secondary education than girls. In the Philippines, however, girls from the poorest households are more likely to complete primary to upper secondary education than boys.

In countries such as India and Mongolia, girls and boys from the richest and poorest households almost equally complete primary education. However, there are wider gender disparities in completion rates, in favour of

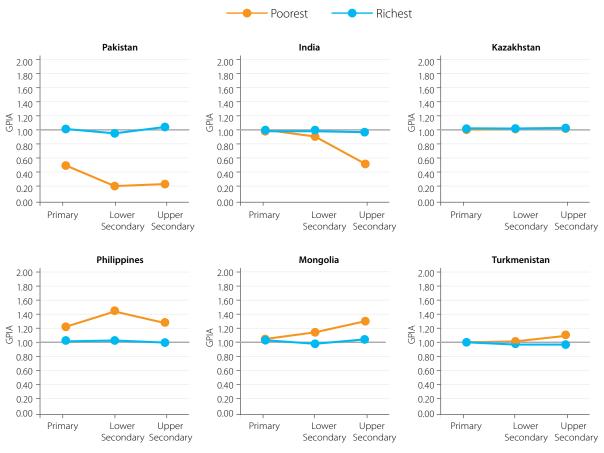
boys for India, and in favour of girls for Mongolia, over the course of the secondary education trajectory.

On the other hand, in countries such as Kazakhstan and Turkmenistan, gender disparity by the economic status is less prominent. In Kazakhstan, for instance, girls and boys from the richest and poorest households almost equally complete primary to upper secondary education.

The number of out-of-school children, adolescents and youth decreased by about 7.8 million in the Asia-Pacific between 2015 and 2019. Yet the region is still home to 50 per cent of the world's out-of-school population.

In the Asia-Pacific, the number of out-of-school children, adolescents, and youth, prior to COVID-19, had been steadily decreasing since 2000, and between 2015 and 2019 alone, the number of out-of-school population fell by about 7.8 million. As of 2019, 128 million are out-of-school population in the region,

Figure 2. Adjusted gender parity index for completion rates for primary, lower secondary, and upper secondary education by wealth in selected countries, latest year



Source: UIS Database (Nd.)

Notes: Based on the latest data available ranging from 2015 and 2018. An Adjusted Gender Parity Index (GPIA) compares females and males where a value of less than '1' represents disparity in favour of males and a value greater than '1' represents disparity in favour of females. The adjusted parity index is limited to a range between '0' and '2'. A value of 0.97-1.03 indicates parity between the two groups.

representing 50 per cent of out-of-school population worldwide. In the Asia-Pacific, 74 per cent of the out-of-school population are in Southern Asia alone.

When looking at the situation by education level, the out-of-school population is most prominent at upper secondary level. Between 2015 and 2019, the number of out-of-school youth of upper secondary age (typically between ages 15 and 17) was reduced from 89 million to 83 million in the Asia-Pacific. However, it accounted for 65 per cent of the total out-of-school population in the region in 2019, compared to 20 per cent (or

26 million) for out-of-school adolescents of lower secondary age (typically between ages 12 and 14) and 15 per cent (or 19 million) for out-of-school children of primary age (typically between ages 6 and 11).

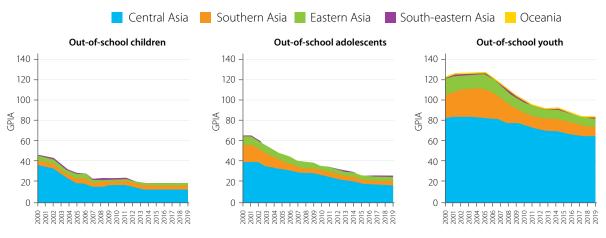
Out-of-school youth of upper secondary age account for 65 per cent of the total out-of-school population in the region.

Among 33 countries with the latest available data, out-of-school youth tend to be concentrated in a few countries: Bangladesh (4.8 million), Indonesia (3.1 million) and

Afghanistan (1.4 million). The countries with the highest rates of out-of-school youth²³ are Afghanistan at 56 per cent, Tuvalu at 50 per cent and Papua New Guinea at 46 per cent. Even though some countries in Oceania such as the Marshall Islands, Tokelau, Tuvalu and Vanuatu may only have a small number of out-of-school youth,

the proportion is greater than 40 per cent. The high proportion of out-of-school youth in these Pacific Island States inflates the overall out-of-school youth rate in Oceania, which is 26 per cent in 2019. While the average out-of-school youth rate for Australia and New Zealand is 7 per cent, the figure is 43 per cent for other Oceanian countries.

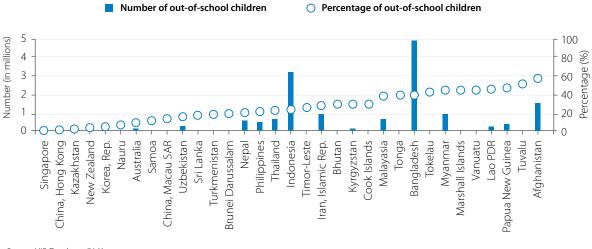
Figure 3. Number of out-of-school children, adolescents, and youth by sub-region, 2000–2019



Source: UIS Database (Nd.)

Note: The calculation method of out-of-school rates and numbers was changed in 2019 to count children of primary age in pre-primary education as in school (UIS, 2020).

Figure 4. Out-of-school rate for youth of upper secondary school age in selected countries, 2019 or latest



Source: UIS Database (Nd.)

Note: The latest data available range between 2015 and 2019.

²³ According to the definition used by the UNESCO institute for Statistics, Youth refers to persons aged between 15 and 24 years old.

31 Asia-Pacific countries administered a large-scale assessment in reading and mathematics at all assessment points of SDG 4 requirements.

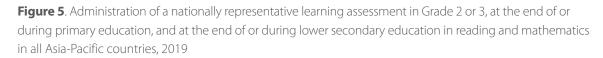
Assessing learning outcomes allows us to measure learning and identify learning gaps early on. In 2019, 31 out of 50 Asia-Pacific countries with available data reported that they regularly monitor learning outcomes for children and young people in reading and mathematics at all assessment points via large-scale assessments as outlined in the SDG 4 requirements. In the remaining 9 out of 18 countries, large-scale assessments commonly take place at two assessment points, where the majority of countries administer a large-scale assessment in reading and mathematics in Grade 2 or 3 and at the end of or during lower secondary education.

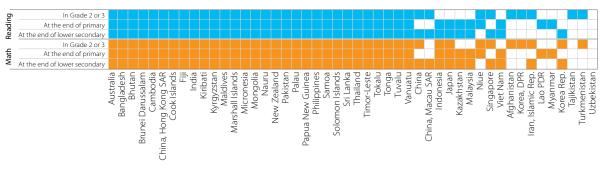
Less than 50 per cent of children in school achieve the minimum proficiency level in reading and mathematics in early grades of primary education in some Asia-Pacific countries.

Even when children and young people are enrolled in school, they may not have acquired foundational reading and mathematics skills. In countries such as Afghanistan, Bangladesh, India, Kyrgyzstan, and Pakistan less than 50 per cent of children in school achieve the minimum proficiency level in reading in the early grades of primary education. Similarly, the proportion of children with the minimum proficiency level in mathematics is less than 50 per cent in Afghanistan, Bangladesh, Indonesia, the Islamic Republic of Iran, Kyrgyzstan, Pakistan and Thailand at the beginning of primary education.

An even smaller share of children and young people achieve the minimum proficiency level in reading in later education levels in 13 out of 17 countries where data for at least two assessment points are available. For instance, in Kazakhstan, 98 per cent of children achieve the minimum learning outcomes in reading at the end of primary education, while the figure is 36 per cent for adolescents at the end of lower secondary education.

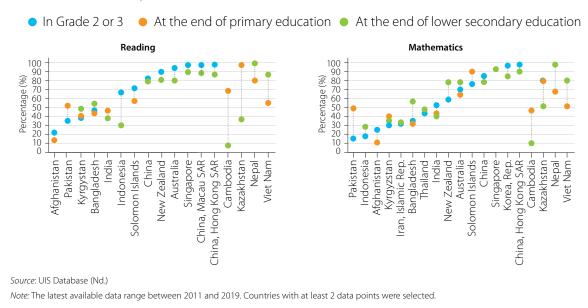
The same trend is seen in mathematics in 8 out of 19 countries where the percentage of children with the minimum proficiency level is larger in earlier education levels. However, in other countries, a greater share of adolescents achieves at least the minimum proficiency level in mathematics at the end of lower secondary education than during or at the end of primary education. For example, in New Zealand, 78 per cent of adolescents achieve the minimum





Source: UIS Database (Nd.)

Figure 6. Proportion of students achieving the minimum proficiency level in reading and mathematics by level in selected countries, 2019 or latest



learning outcomes in mathematics at the end of lower secondary education, compared to 59 per cent of children in Grade 2 or 3.

Key Highlights and Remaining Challenges

In the Asia-Pacific, most children enter and complete primary education, and then continue to study in lower secondary education. However, many young people still do not complete secondary education, sometimes resulting in a large share of out-of-school adolescents and youth population in the region. Nonetheless the number of out-of-school children, adolescents, and youth decreased by about 7.8 million in the region, prior to COVID-19.

Out-of-school youth of upper secondary age account for 65 per cent of the total out-of-school population in the region. Furthermore, at present 31 Asia-Pacific countries administer a large-scale assessment in reading and mathematics at all assessment points of SDG 4 requirements. In some countries, especially those in Southern Asia, less than half of children in school achieve the minimum proficiency level in reading and mathematics in early

grades of primary education, and an even smaller share of children and young people achieve the minimum proficiency level in reading in later education levels.

'Despite tremendous efforts and progress being made in previous years, the Asia-Pacific region needs to renew its commitment to support children and young people to stay in school, especially secondary level, so that all children and young people in the region complete basic education.'

While measures should be taken to prevent children and youth from dropping out of school, a parallel effort should also be made in order to ensure educational opportunities for those who are already out of school. Furthermore, early learning must be recognized as the foundation for learning outcomes. The data show that there is a clear need for equipping a larger share of children with basic reading and mathematics skills at the beginning of primary education, as well as raising reading and mathematics proficiency through the course of basic education in many Asia-Pacific countries.



Target 4.2: Early Childhood and Pre-primary Education

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

Children's exposure to early learning is crucial for laying the foundation for lifelong learning. Target 4.2 reaffirms the importance of early childhood education in nurturing children's cognitive, social and emotional capabilities, that prepare them to participate in primary education and beyond.

Recognizing that a holistic approach to early childhood education can unlock huge development potential, this target calls for the provision of at least one year of free and compulsory pre-primary education. However, pre-primary education programmes are still neither free nor compulsory in many Asia-Pacific countries. Moreover, access to quality organized learning programmes and home learning environments are mostly enjoyed by children from privileged backgrounds.

Progress Assessment

The gross enrolment ratio for pre-primary education has increased in the Asia-Pacific over the past years. In Eastern Asia alone, the ratio grew by nine percentage points between 2015 and 2019.

Between 2015 and 2019, all sub-regions in the Asia-Pacific showed an increase in the share of children enrolled in pre-primary education regardless of their age. The most significant progress was observed in Eastern Asia where the GER for pre-primary education increased from 79 per cent to 88 per cent, followed by Oceania where the figure increased from 71 per cent to 76 per cent. In Oceania, an increasing sub-regional average for pre-primary GER may be led by Australia and New Zealand, where the figure grew from 115 per cent to 146 per cent between 2015 and 2019. It is likely that such rates are due to an increase in overage or underage enrolment.

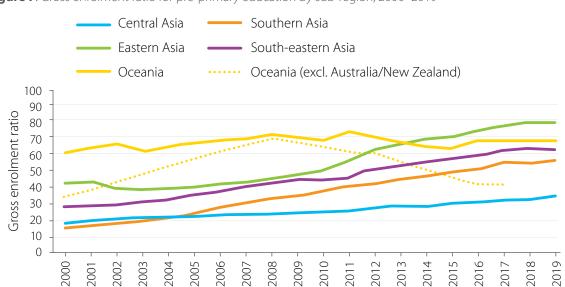


Figure 7. Gross enrolment ratio for pre-primary education by sub-region, 2000–2019

Source: UIS Database (Nd.)

All Asia-Pacific countries have policies that support 1–4 years of pre-primary education. But the period of commitment varies and provision is free and compulsory in only seven countries.

The Education 2030 Framework for Action encourages countries to provide at least one year of free and compulsory quality pre-primary education (UNESCO, 2015). Still, many Asia-Pacific countries are struggling to provide pre-primary education through their public education systems. As of 2019, around 10 per cent of pre-primary students in Central Asia and 30 per cent of pre-primary students in Southern Asia were enrolled in private programmes, while approximately 50–60 per cent of pre-primary enrolment was in private institutions in the rest of the Asia-Pacific.

Countries in the region have policies that support 1–4 years of pre-primary education, while in 23 out of 50 Asia-Pacific countries the most common programmes take place over three years. Out of the 50 Asia-Pacific countries, 20 provide free pre-primary education, of which seven countries stipulate that pre-primary education should be compulsory. In countries with free and compulsory pre-primary education, the share of private enrolment in pre-primary education is small. For instance, less than 11 per cent of pre-primary students are enrolled in private pre-primary programmes in the Philippines, and Kyrgyzstan is as low as 4 per cent.

In countries where children are exposed to quality organized learning programmes or home learning environments, a higher proportion of children is developmentally on track.

In 8 out of 16 Asia-Pacific countries with available data, more than 85 per cent of children under five years old are well-prepared for starting primary school in terms of health, learning and psychosocial well-being. Figure 9 shows that in countries where a large share of children participate in an organized learning

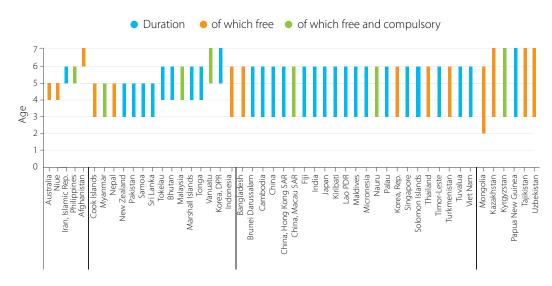
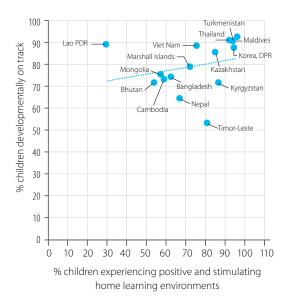


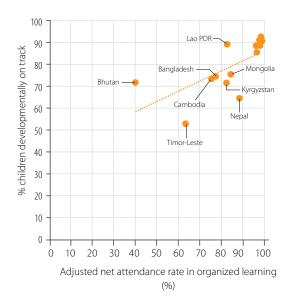
Figure 8. Number of years of pre-primary education in all Asia-Pacific countries, 2019

Source: UIS Database (Nd.)

Note: Countries that partially provide free and compulsory pre-primary education are included.

Figure 9. Relationship between the proportion of children under 5 years of age who are developmentally on track, adjusted net attendance rate one year before the official primary entrance age, and those experiencing positive and stimulating home learning environments in selected countries, latest year.





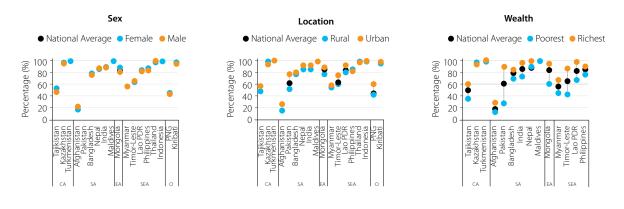
Source: UIS Database (Nd.)
Note: The latest available data range between 2010 and 2019

programme one year before entering primary education, a higher proportion of children are developmentally on track. Similarly, in countries where a large share of children under five years old live in households that are supportive and provide stimulating home learning environments, a higher proportion of children meet age-appropriate levels of development.

Although these are not causal relationships, the data suggest that investment in quality organized learning programmes and home learning environments appears to have a positive association with children's ageappropriate levels of development in Asia-Pacific countries.

Children from rural areas and the poorest families are less likely to have access to organized learning activities one year before they start primary school. In 8 out of 18 countries with available data, more than 85 per cent of children participated in an organized learning programme one year before entering primary education. In general, girls and boys tend to participate in organized learning opportunities almost at the same rate across the Asia-Pacific. However, disparities in terms of location and wealth appear to be more severe than disparity by gender. Children from rural areas and the poorest families are less likely to be exposed to organized learning activities in the year prior to starting primary school. For example, as of 2018, in Pakistan girls and boys participated equally in organized learning immediately before primary school entry age. However, 52 per cent of children from rural areas and 28 per cent of children from poor families attended organized learning, while the national average stood at 61 per cent.

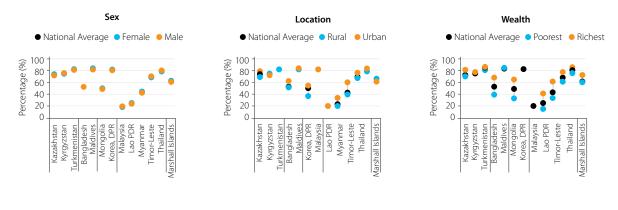
Figure 10. Adjusted net attendance rate one year before the official primary entrance age in selected countries, 2019 or latest



Source: UIS Database (Nd.)

Note: The latest data are available between 2015 and 2019. In this chart CA stands for Central Asia, SA for Southern Asia, EA for Eastern Asia, SEA for South-eastern Asia, and O for Oceania.

Figure 11. Percentage of children under 5 years experiencing positive and stimulating home learning environments in selected countries, 2019 or latest



Source: UIS Database (Nd.)

Note: The latest data available range between 2015 and 2019. Wealth disaggregated data for richest in Korea, DPR, Malaysia, and the Maldives are not available. CA stands for Central Asia, SA for Southern Asia, EA for Eastern Asia, SEA for South-eastern Asia, and O for Oceania.

Children from rural areas and the poorest families are less likely to experience positive and stimulating home learning environments.

In 6 out of 13 Asia-Pacific countries with available data, more than 85 per cent of children live in households where adults interact with them in meaningful and stimulating ways, for instance through reading books and telling stories to promote learning and school readiness. Both girls and boys experience quality home learning environments almost equally.

However, there are marked disparities by location and wealth at the expense of children from rural areas and the poorest families in many countries. In Myanmar, data as of 2016 shows that an almost equal share of girls and boys lived in households that provide stimulating learning environments. This was the

case for 52 per cent of children at the national level, but only for 47 per cent of children from rural areas and 41 per cent of those from lowest-earning households.

Key Highlights and Remaining Challenges

Pior to COVID-19, an increasing number of children in the Asia-Pacific had been enrolling in pre-primary education over the past years. All 50 Asia-Pacific countries currently have policies that support 1–4 years of pre-primary education. Yet, only seven countries provide free and compulsory pre-primary education. The period of commitment and the quality of provision also vary considerably in part because provision is often through non state-actors. As a result, private pre-primary education is a dominant option in many parts of the region, which places a financial burden on households. Exposure to organized learning programmes and home learning environments appears

positively associated with children's ageappropriate levels of development. However, access to these is still privileged for children from wealthy families and urban areas.

To harness the potential of early childhood education in producing long-term benefits in children's development and educational outcomes, further commitment will be needed among Asia-Pacific countries to guarantee the provision of at least one year of free and compulsory education in national policies and legislation. In addition, more efforts are encouraged to increase services and infrastructure to provide pre-primary education through public education systems. Investment in quality organized learning programmes and home learning environments should also be expanded, especially for those from low-income families and rural areas, to enable more children to receive the care and education that will allow them to develop their full potential.



Target 4.3: Technical, Vocational, Tertiary and Adult Education

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

Target 4.3 calls for increasing access to quality vocational education, tertiary education, and adult learning as important elements of lifelong learning and of sustainable social and economic development. In recent years, significant economic progress in the Asia-Pacific has increased the demand for a skilled workforce as the foundation for sustainable economic development. This may have accelerated enrolment in both vocational education and tertiary education in the region. As a result, governments in the region are keen to invest in vocational education, tertiary education, and adult learning so that youth and adults can keep developing and strengthening the knowledge, skills and competencies that, beyond basic education, are essential for work and life.

Progress Assessment

The proportion of 15–24-year-olds enrolled in vocational education in many parts of the Asia-Pacific is higher than the world average of 5 per cent.

The proportion of youth participating in vocational education is higher than the global average of 5 per cent in most sub-regions of the Asia-Pacific, the exception being Southern Asia where it is only 2 per cent. Youth participation in vocational education is most popular in Central Asia and Oceania where the proportion of 15–24-year-olds enrolled in vocational education stands at 16 and 9 per cent respectively as of 2019. On the other hand, these rates decrease in both sub-regions since 2015, indicating that this may be a decreasing

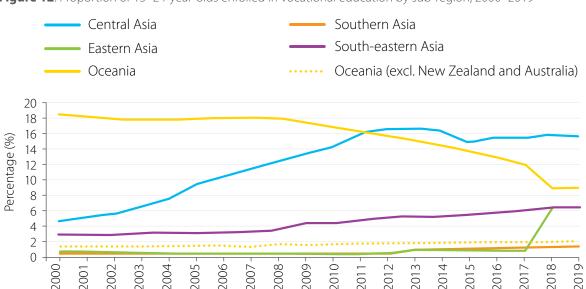


Figure 12. Proportion of 15–24-year-olds enrolled in vocational education by sub-region, 2000–2019

Source: UIS Database (Nd.)

trend. In Eastern Asia and South-eastern Asia, however, the percentage of young people participating in vocational education actually increased between 2015 and 2019, with a spike in enrolment from 1 per cent to 7 per cent in Eastern Asia alone. In Southern Asia, no significant change was observed in the level of youth participation in vocational education between 2015 and 2019

Among six countries with available data, the most significant progress is identified in New Zealand where the percentage of young people enrolled in vocational education increased by 4 percentage points between 2015 and 2018. On the other hand, in Australia, the proportion decreased by 9 percentage points between 2015 and 2018, which is the largest drop in the Asia-Pacific. This may have affected a decreasing trend in the sub-regional average in Oceania. Except for Australia and New Zealand, the average figure for other Oceanian countries remained 2 per cent between 2015 and 2019.

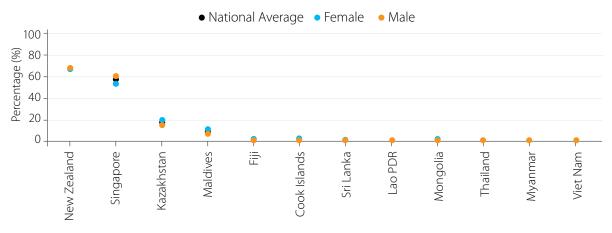
In 9 out of 12 countries with data, less than 10 per cent of youth and adults participated in formal and non-formal education and training in the previous 12 months.

In New Zealand and Singapore, more than 50 per cent of youth and adults have taken part in formal or non-formal education and training in the previous 12 months. However, in nine of twelve countries with available data, the participation rate is less than 10 per cent both for women and men, even before the disruption of COVID-19. In countries where previous data points are available, the percentage of youth and adults participating in formal or non-formal education or training are on the decrease. For instance, in Myanmar, the figure decreased from 2.1 per cent to 0.4 per cent between 2015 and 2017. Similarly, in Fiji, it decreased from 1.9 per cent to 0.9 per cent between 2011 and 2016.

The gross enrolment ratio for tertiary education increased in all Asia-Pacific sub-regions between 2015 and 2019, with a widening gender disparity in favour of women in Eastern Asia, South-eastern Asia and Oceania.

Over the past decades, the GER for tertiary education has been on the increase in all Asia-Pacific sub-regions, a trend which has continued between 2015 and 2019. In particular, the GER for tertiary education increased from 48 per cent





Source: UIS Database (Nd.)

Note: The latest data available range between 2015 and 2017. Male data for the Cook Islands are missing.

in 2015 to 54 per cent in 2019 in Eastern Asia. This exceeds the world average of 36 per cent in 2019. In Oceania, while the figure decreased from 77 per cent to 70 per cent, especially from 112 per cent to 104 per cent in Australia and New Zealand, during the same period, it also showed higher enrolment in tertiary education than the world average.

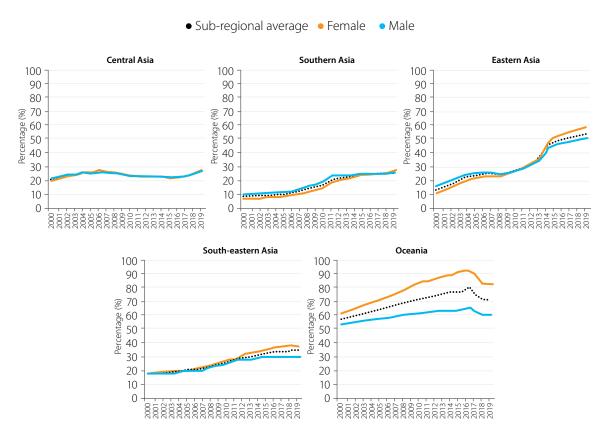
When it comes to gender, women and men are equally enrolled in tertiary education in Central Asia and Southern Asia, with noticeable progress towards gender parity in Southern Asia in the past years. However, widening gender disparity can be observed in favour of women in Eastern Asia, South-eastern Asia, and Oceania. In particular, in Oceania where the largest gender gap can be observed, as of 2019, women are 21 percentage points more likely to be enrolled in tertiary education than men.

There are still significant barriers to accessing tertiary education, with the gross enrolment ratio standing at less than 50 per cent in many parts of the Asia-Pacific.

Despite increasing enrolment in tertiary education over the past decades, participation is still limited when compared to basic education. While the GER for primary education exceeds 100 per cent in all Asia-Pacific subregions, this figure falls over the course of the education trajectory. The most prominent drop between upper secondary education and tertiary education is seen in Central Asia, where the GER for tertiary education is 27 per cent, compared to 93 per cent in upper secondary education in 2019.

There are a number of barriers that continue to affect participation levels in tertiary education. Its high cost often makes it less accessible to

Figure 14. Gross enrolment ratio for tertiary education by sub-region, 2000–2019



Source: UIS Database (Nd.)

the poor, and the concentration of universities in urban centres has also meant that many students from rural areas have had to migrate, and in consequence adapt to a far higher cost of living. The lack of opportunities when it comes to obtaining student loans, especially in sub-regions such as Southern Asia has also restricted participation. At a time where there is a demand for skilled graduates, there is a need for innovative financing mechanisms such as income-contingent loans, that could help increase participation in tertiary education for those that are less privileged.

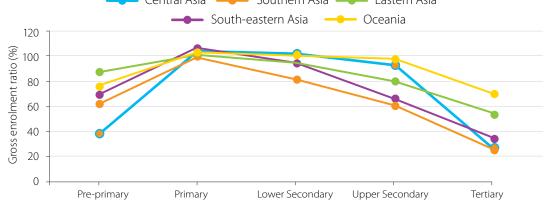
Key Highlights and Remaining Challenges

The share of youth participation in vocational education in the Asia-Pacific is higher than the world average. In particular, Central Asia and Oceania enrol a larger proportion of young people in vocational education than the rest of the region. Participation in tertiary education remains limited compared to basic education, and a widening gender disparity in tertiary education enrolment in favour of women in

Eastern Asia, South-eastern Asia, and Oceania has been observed in the past years. Currently, very few youth and adults participate in formal and non-formal education and training.

While vocational education is an attractive educational choice for youth in many parts of the Asia-Pacific compared to the rest of the world, there is still much to be done to translate vocational education into a meaningful educational option for young people in Southern Asia. For example, vocational education receives a small share of national higher education funding. Reduced budgets impact faculty salary, studentfaculty ratio, student support services, and facilities maintenance. Barriers to accessing tertiary education, such as affordability and accessibility, must be reduced in order to ensure participation for students of all socioeconomic levels. Furthermore, adult education, which is a critical venue to impart adult literacy and life-skills to promote life-long learning, should be invested more beyond high-income countries in the region.





Source: UIS Database (Nd.)

INCREASE THE NUMBER OF PEOPLE WITH RELEVANT SKLLS FOR PINANCIAS. SUCCESS

Target 4.4: Skills for Work

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.

Against a backdrop of ever-changing labour market demands and technological advancements, there is an increasing need to equip youth and adults with essential skills for employment, entrepreneurship and life. While skills for work are also often acquired outside of formal education and throughout life, they also depend on quality learning opportunities.

The Asia-Pacific is home to the largest share of the world's youth population. Building skills for ICT, sustainability, entrepreneurship as well as foundation and transversal skills are critical to empower young people to become more resilient and adaptable to rapidly changing labour market dynamics across the Asia-Pacific.

Progress Assessment

An increasing number of youth and adults are learning ICT skills, especially in high-income countries, but the level of ICT and digital skills remains generally low in the Asia-Pacific.

In 18 Asia-Pacific countries with available data, country income levels and the share of youth and adults with basic ICT skills appear positively correlated. In high-income countries such as Brunei Darussalam, Hong Kong (SAR of China), Republic of Korea, and Singapore, a large proportion of youth and adults are equipped with basic ICT skills. In particular, more than 50 per cent of youth and adults in these countries are proficient at copying or moving a file or folder, using copy and paste tools to duplicate or move information within a document, and sending e-mails with attached files.

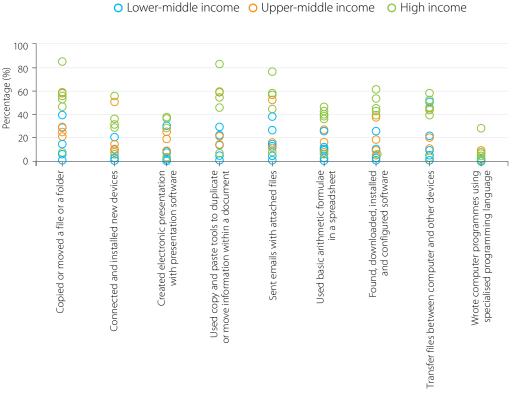
There is a generally smaller proportion of youth and adults with basic ICT skills in lower-middleincome and lower-upper-income countries than in high-income countries. Gaps among countries with different income levels are especially pronounced in the proficiency of finding, downloading, installing, and configuring software. Less than 5 per cent of youth and adults are capable of this activity in lower-middle-income countries such as Bangladesh, Cambodia, Pakistan, and the Philippines, while the figure is about 20-40 per cent in upper-middle-income countries including Kazakhstan and Malaysia, and 40–60 per cent in high-income countries such as Brunei Darussalam and the Republic of Korea. Such inequalities in ICT skills can have equity implications as governments attempt to switch to online education platforms, even when the required hardware and connectivity exist, the skills required to access the educational content may not be present.

It is worth noting that in countries of all income levels, the share of youth and adults who can write a computer programme using a specialized programming language remains limited. In Singapore for instance, only 7 per cent of youth and adults have this skill. Moreover, unlike other high-income countries, less than 10 per cent of youth and adults in Japan are equipped with all the 9 types of basic ICT skills.

Gender disparity in favour of men exists in all ICT skills listed in the SDG 4 requirements.

In almost all 15 countries with available data, men are generally more likely to have basic ICT skills than women. The most severe gender disparity in

Figure 16. Proportion of youth (aged 15–24 years) and adults (aged 15 years and above) with ICT skills in selected countries, 2019 or latest



Source: UIS Database (Nd.)

Note: The latest data are available between 2017 and 2019. Income grouping is based on the 2019 World Bank income classifications

favour of men can be observed in Pakistan, where less than 45 women for every 100 men have basic ICT skills. Exceptions can be found such as in Brunei Darussalam, where women and men are equally equipped with all the basic ICT skills, as well as Cambodia and Thailand where in general a larger share of women has ICT skills than men.

While more adults in the Asia-Pacific have completed primary education in the past years, a larger proportion of them have not finished secondary education.

Educational attainment is a measurement of human capital development which is vital for economic productivity and social well-being of individuals and society. In 14 countries with available data, primary education attainment rates for the adult population at least 25 years and older exceed 80 per cent in 8 countries, and among those, the figure stands at 100 per cent for Australia, Kazakhstan and Uzbekistan.

In many Asia-Pacific countries, however, a larger proportion of adults have not completed secondary education compared to primary education. In Indonesia for instance, 78 per cent of the adult population completed at least primary education, compared to 51 per cent of adults completing lower secondary education and 35 per cent completing upper secondary education.

Despite this trend, almost the entire adult population attained at least upper secondary education in Central Asian countries such as Kazakhstan and Uzbekistan. Between 2015 and 2019, the countries with available data have slightly higher educational attainment rates from

primary to upper secondary education such as Australia, Bangladesh, Hong Kong (SAR of China), Indonesia, Singapore, Sri Lanka and Uzbekistan.

A slightly larger share of adult men complete education than adult women at all levels of education.

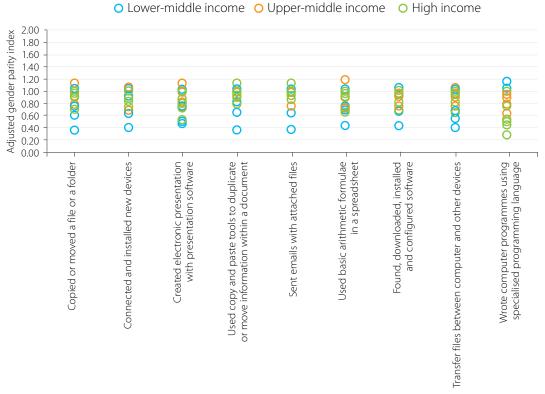
Gender disparity in educational attainment rates remains small in many countries. However, where disparity exists, men are slightly more likely to complete the level of education than women. The largest gender gap can be observed in Pakistan where 60 per cent of adult men completed at least primary education compared to 38 per cent of adult women. The gender gap is somewhat reduced in secondary education in Pakistan, where the educational

attainment rate stands at 33 per cent for adult men and 21 per cent for adult women in upper secondary education.

Key Highlights and Remaining Challenges

Youth and adults in high-income countries are more likely to be proficient in basic ICT skills compared to their peers in lower-income countries. Men are generally more likely to have basic ICT skills than women. However, a share of youth and adults who can write a computer programme using a specialized programming language remains limited in countries across all income levels. While many more adults in the Asia-Pacific have completed at least primary education in the past years, a larger adult population has not finished secondary education.

Figure 17. Adjusted gender parity index for the proportion of youth and adults with ICT skills in selected countries, 2019 or latest



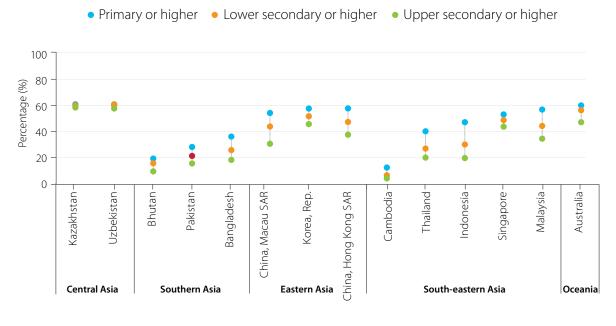
Source: UIS Database (Nd.)

Note: The latest data are available between 2016 and 2019. Income grouping is based on the 2019 World Bank income classifications. An Adjusted Gender Parity Index (GPIA) compares females and males where a value of less than '1' represents disparity in favour of males and a value greater than '1' represents disparity in favour of females. The adjusted parity index is limited to a range between '0' and '2'. A value of 0.97–1.03 indicates parity between the two groups.

Further investment in adult education and training will be essential, especially in lower-income countries in the region to ensure youth and adults acquire the knowledge, skills and competencies for decent work and life. ICT skills will continue to play a much more prominent role in work and learning, especially in response

to pandemics which demand online learning and teleworking. Beyond mastering work-specific skills, youth and adults should be provided with educational opportunities to learn cognitive and non-cognitive skills that are the foundation for a range of occupational fields.

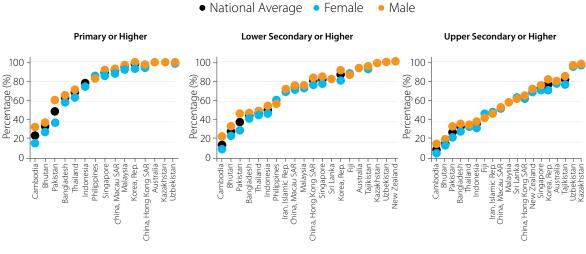
Figure 18. Educational attainment rates of population 25+ years in selected countries, 2019 or latest



Source: UIS Database (Nd.)

Note: The latest data are available between 2017 and 2019. Income grouping is based on the 2019 World Bank income classifications.

Figure 19. Educational attainment rates of population 25+ years by sex in selected countries, 2019 or latest



Source: UIS Database (Nd.)

Note: The latest data available range between 2015 and 2019.

TARGET 4-5

Target 4.5: Equity and Inclusion

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.

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Equity and inclusion are at the heart of the Education 2030 agenda. However, the commitment to giving everyone an equal opportunity and leaving no one behind requires accelerated and targeted efforts to address all forms of exclusion and marginalization. Target 4.5 places an explicit emphasis on equity and inclusion to ensure quality education and lifelong learning opportunities for all people regardless of their age, sex, race, class, ethnicity, language, religion, location and socio-economic status.

In the Asia-Pacific, access to basic education has expanded in recent decades. Yet, children and young people, especially those from rural areas and low-income families, are at a disadvantage of attending school and learning basic reading and mathematics skills. Moreover, there are significant gender differences with regard to attendance in TVET programmes and tertiary education. Further commitment to financing education is vital for achieving the right to education for all children, young people and adults, especially as COVID-19 is likely to have intensified already existing disparities.

Progress Assessment

Assessing Equity in Early Childhood Education

In countries where a lower proportion of children are developmentally on track, there is a large disparity in age-appropriate levels of development at the expense of boys, children from rural areas and poor families.

The global indicator on early childhood education aims to capture the proportion

of children under five years old who are developmentally on track in terms of health, learning and psychosocial well-being. In countries such as Korea, DPR, Thailand and Viet Nam where around 90 per cent of children exhibit age-appropriate levels of development, children are developmentally on track, well-prepared for starting primary education regardless of gender or location, and disparity by family wealth is small. In countries such as Nepal and Pakistan, however, where less than 70 per cent of children exhibit age-appropriate levels of development, girls, children from urban areas, and those from rich families are much more likely to be developmentally on track, compared to boys, children from rural areas and poor families.

Assessing Equity in Basic Education

Inequalities in access to education by household economic status and geographical location become more pronounced over the course of the education trajectory.

Those living in rural areas and from low-earning households are at a disadvantage of setting foot in a classroom as early as primary level. In all countries with available data, they are far more likely to be out of school compared to peers from urban areas and high-earning families by the time they reach upper secondary education. For example, children from urban areas and rich families are less likely to attend primary schools in countries such as Kazakhstan and Maldives. However, those from rural areas and poor families are more than 1.5 times likely to be out of school in upper secondary education in these countries.

Figure 20. Parity indices for children aged 36–59 months who are developmentally on track in at least three of the following domains: literacy-numeracy, physical development, social-emotional development and learning in selected countries, 2017 or latest



Notes: Developmentally on track is a term to define children within a certain age range who have reached specific milestones. The Gender Parity Index (GPI) compares females and males, the Location Parity Index (LPI) compares rural and urban location, and the Wealth Parity Index (WPI) compares the poorest 10 per cent of the population and richest 10 per cent of the population. A value of less than '1' represents disparity in favour of the category in the denominator (males for GPI; urban for LPI; richest quintile for WPI). A value greater than '1' represents disparity in favour of the numerator category (females for GPI; rural for LPI; poorest quintile for WPI). A value of 0.97–1.03 indicates parity between the two groups.

Some countries such as Tajikistan exhibit improvement of out-of-school rates towards equity in the past years. The wealth parity index for out-of-school youth changed from 1.29 to 1.16 between 2012 and 2017. However, youth from the lowest-income families are still 1.29 times more likely to be out of school than peers from rich families in upper secondary education.

In terms of gender, more boys are out of school than girls at all levels of education in some countries in South-eastern Asia such as the Philippines, Thailand, and Timor-Leste, while more girls are out of school than boys in Southern Asia such as Afghanistan, India, Nepal and Pakistan.²⁴

In the Asia-Pacific, both socio-economic status (SES) and geographical factors largely set apart students' learning outcomes during the course of the education trajectory. Figure 23 shows that in all countries with data, students from rural areas and poor families are less likely to meet the minimum proficiency standards in both reading and mathematics at the end of lower secondary education, compared to peers from urban areas and rich families. Even in Singapore, which was ranked second in the Programme for International Student Assessment (PISA) in 2018 (OECD, 2019), only 28 students from the poorest household for every 100 students from the richest families achieve the minimum proficiency level in mathematics at the end of lower secondary education.

By the end of lower secondary education, disparities in proficiency level in reading and mathematics are especially prominent by location and socio-economic status, putting students from rural areas and poor families at a disadvantage.

²⁴ For more information on out-of-school children and educational exclusion, see, for example: <u>'Learning Against the Odds: Evidence and Policies to Support All Out-of-School Children and Adolescents in East Asia and Pacific' (UNICEF EAPRO, 2019a).</u>

2.00 1.80 Adjusted parity index 1.60 1.40 1.20 1.00 0.80 0.60 0.40 0.20 0.00 Philippines -Maldives -Thailand -New Guinea -Afghanistan -Pakistan -Timor-Leste Indonesia Afghanistan Turkmenistan Timor-Leste Lao PDR Papua New Guinea Pakistan Kazakhstan ndonesia Myanmar Turkmenistan Maldives Thailand imor-Leste Turkmenistan **Sazakhstar** Fajikistar New Guine Papua № Papua Location Wealth 2.00 1.80 Adjusted parity index 1.60 1.40 1.20 1.00 0.80 0.60 0.40 0.20 0.00 Philippines -Turkmenistan -Timor-Leste -Indonesia -Afghanistan -Turkmenistan -Lao PDR -Maldives -Lao PDR -Pakistan Afghanistan Timor-Leste Pakistan Nepal Lao PDR Nepal India New Guinea Thailand Papua New Guinea **Fajikistan** Philippines Myanmar New Guinea Nepal ndonesia **Kiribati** Kazakhstan ndonesia Aaldives Maldives Mongolia imor-Leste Bangladesh Myanma ajikistar Kazakhstar **Fajikistar** Afghanistar Turkmenistar Papua I Wealth Sex Location 2.00 1.80 Adjusted parity index 1.60 1.40 1.20 1.00 0.80 0.60 0.40 0.20 0.00 Turkmenistan Afghanistan Mongolia Kazakhstan Timor-Leste Lao PDR Thailand India Timor-Leste Maldives Turkmenistan Indonesia Nepal Lao PDR mor-Leste Maldives India Papua New Guinea Pakistan Tajikstan Philippines Lao PDF Furkmenistan Tajikstan Afghanistan Papua New Guinea Kazakhstan Pakistan Philippines Bangladesh Papua New Guinea Ayanma Location Wealth

Figure 21. Adjusted parity indices (sex, location and wealth) for out-of-school rates for children, adolescents, and youth of primary, lower secondary and upper secondary school age in selected countries, 2019 or latest

Source: UIS Database (Nd.)

Notes: The latest data available range between 2015 and 2019. An Adjusted Gender Parity Index (GPIA) compares females and males, an Adjusted Location Parity Index (LPIA) compares rural and urban location, and an Adjusted Wealth Parity Index (WPIA) compares the poorest 10 per cent of a population and richest 10 per cent of a population. A value of less than '1' represents disparity in favour of the category in the denominator (males for GPIA; urban for LPIA; richest quintile for WPIA). A value greater than '1' represents disparity in favour of the numerator category (females for GPIA; rural for LPIA; poorest quintile for WPIA). The adjusted parity index is limited to a range between '0' and '2'. A value of 0.97–1.03 indicates parity between the two groups.

A similar trend is observed in a new regional large-scale assessment, the South East Asia Primary Learning Metrics (SEA-PLM), which revealed that one out of three children in Grade 5 in participating countries is still performing at the level expected in the early years of primary education, with substantive learning gaps due to gender, SES and location disfavouring boys, those from poorest households and those in remote rural areas across participating countries (UNICEF EAPRO and SEAMEO, 2020).

In almost all countries with available data, girls are more likely to achieve the minimum proficiency in reading at the end of lower secondary education. In Cambodia, Indonesia, Kazakhstan, the Philippines, and Thailand, girls are about 1.3 times more likely to meet the proficiency level than boys. On the other hand, gender disparity is relatively small in Kazakhstan, and Malaysia, students equally achieve a minimum proficiency level regardless of the language status.

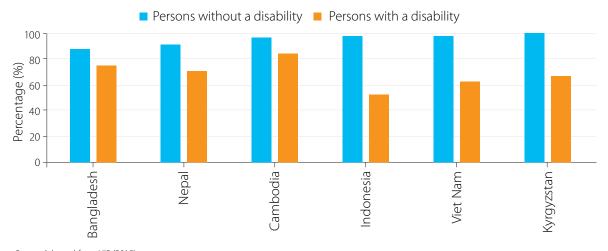


People with disabilities are 50–70 per cent less likely to have attended school in some Asia-Pacific countries.

While cross-nationally comparable data on disability remain limited, UIS launched internationally comparable data on disability in some countries in 2018 (UIS, 2018). The following figure suggests that in Asia-Pacific countries such as Indonesia, Kyrgyzstan, and Viet Nam, where almost all persons without disabilities between age 15 to 29 have attended school, only 53 per cent, 67 per cent, and 63 per cent of persons with disabilities have attended school, respectively.

As a result, persons with disabilities have shorter years of schooling and lower literacy rates, compared to persons without disabilities. In Viet Nam in 2009, disabled persons of age 25 and above had 2.6 years shorter schooling than non-disabled persons, and the literacy rate for disabled persons was 59 per cent, while the figure was 94 per cent for non-disabled persons (lbid).

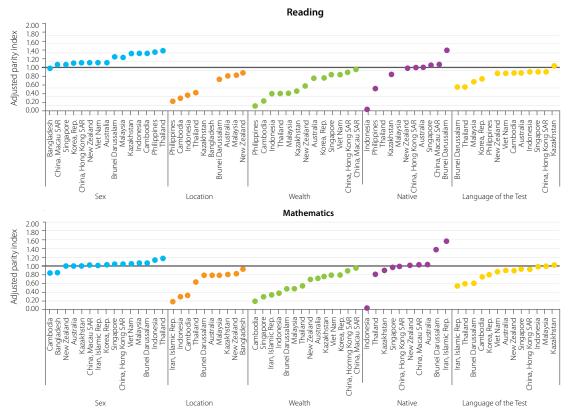
Figure 22. Proportion of 15–29-year-olds who ever attended school by disability status in selected countries, latest year



Source: Adapted from UIS (2018)

Note: The latest data available range from 2008 to 2014.

Figure 23. Adjusted parity indices (sex, location, wealth, native and language of the test) for the proportion of students achieving at least a minimum proficiency level in reading and mathematics at the end of or during lower secondary in selected countries, latest year



Source: UIS Database (Nd.)

Note: The latest data available range from 2015 to 2018. An Adjusted Gender Parity Index (GPIA) compares females and males, an Adjusted Location Parity Index (LPIA) compares rural and urban location, an Adjusted Wealth Parity Index (WPIA) compares the poorest 10 per cent of a population and richest 10 per cent of a population, an Adjusted Native Parity Index (NPIA) compares immigrants and non-immigrants, and an Adjusted Language of the Test Parity Index (LTPIA) compares those who do not speak the language of the test and those who speak the language of the test . A value of less than '1' represents disparity in favour of the category in the denominator (males for GPIA; urban for LPIA; richest quintile for WPIA; non-immigrants for NPIA; Speaker of the test language for LTPIA). A value greater than '1' represents disparity in favour of the numerator category (females for GPIA; rural for LPIA; poorest quintile for WPIA; immigrants for NPIA; Non-speaker of the test language for LTPIA). The adjusted parity index is limited to a range between '0' and '2'. A value of 0.97–1.03 indicates parity between the two groups.

mathematics across the region. Gender parity is met in 8 out of 15 countries with data, where girls and boys somewhat equally achieve the minimum proficiency in mathematics at the end of lower secondary education.

Disparities by immigrant status vary by country. Non-immigrant students are more likely to meet the minimum proficiency standard in both reading and mathematics by the end of lower secondary education in countries such as Indonesia and the Philippines, while in countries such as Brunei Darussalam immigrant students are about 1.4 times more likely to

achieve the minimum proficiency. However, in countries such as Hong Kong (SAR of China) and New Zealand, there is no disparity in the proficiency level in reading and mathematics by immigration status.

Students who speak the language of the test are generally more likely to achieve minimum proficiency levels in both reading and mathematics at the end of lower secondary education in many countries. However, in mathematics, in countries such as Indonesia, Kazakhstan, and Malaysia, students equally achieve a minimum proficiency level regardless of the language status.

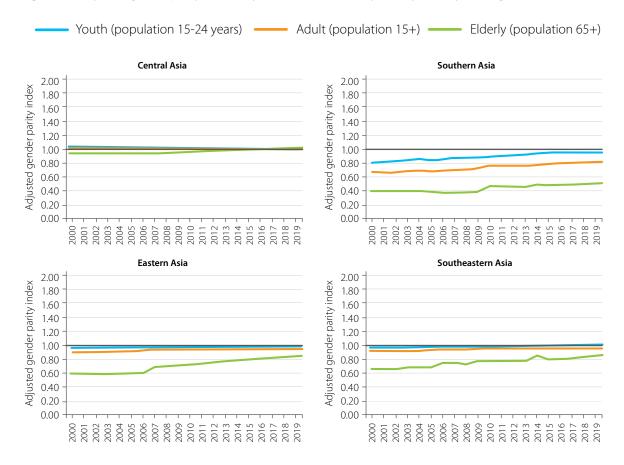
Assessing Equity in Adult Literacy

Adult literacy has increased in many parts of the Asia-Pacific, but only about 80 adult women for 100 adult men are literate in Southern Asia.

In Central Asia, the literacy rate has been close to 100 per cent regardless of age in recent years with gender parity achieved. In Eastern Asia and South-eastern Asia, almost all youth and adults are literate with gender parity as of 2019. Although literacy rates among the elderly

increased from 80 to 85 per cent in Eastern Asia and from 75 to 80 per cent in South-eastern Asia between 2015 and 2019, little more than 85 elderly women for 100 elderly men are literate in both sub-regions in 2019. In Southern Asia, the percentage of literate youth increased from 87 to 90 per cent between 2015 and 2019, while the percentage of literate adults increased from 70 to 74 per cent. Despite these improvements, only 81 adult women out of 100 adult men are literate in 2019. The literacy rate among the elderly stands at 44 per cent in 2019, with gender disparity at the expense of women.

Figure 24. Adjusted gender parity index for youth, adult and elderly literacy rates by sub-regions, 2000–2019



Source: UIS Database (Nd.)

Note: Data for Oceania are not available. An Adjusted Gender Parity Index (GPIA) compares females and males where a value of less than '1' represents disparity in favour of males and a value greater than '1' represents disparity in favour of females. The adjusted parity index is limited to a range between '0' and '2'. A value of 0.97–1.03 indicates parity between the two groups.

10X 2

Literacy in Lao PDR is least prevalent among women from rural areas, those that are poorest and those from minority ethnic populations.

While progress in terms of literacy rates has been promising in many parts of the Asia-Pacific, disparities are still noticeable among rural-urban, rich-poor and ethnic minority populations. Nested disaggregation captures a nuanced picture of literacy rates among disadvantaged population. In Lao PDR for instance, rural women have lower literacy rates than rural men, those who speak a minority ethnic language as their mother tongue have dramatically lower literacy rates than the majority ethnic group, and women from the poorest households have the lowest literacy rates in the country.

100 Richest Quintile Men Urban Men ___ 15-19 Men 90 Urban Women — Lao-Tai Men 20-24 Men Middle Quintile Men 80 15-19 Women Lao-Tai Women -23-34 Men Rural Men -Other, DK, Missing Men -70 Literate population (%) Mon Khmer Men Middle Quintile Women -35-49 Men -60 Poorest Quintile Men -Rural Women — Chinese-Tibetan Men _____ 25-34 Women (50 Other, DK, Missing Women -Hmong Mien Women

Mon-Khmer Women 35-49 Women 40 Chinese-Tihetan Women -30 Poorest Quintile Women -20 10 0 Sex Ethnicity Wealth Location Age group

Figure 25. Literacy rate disaggregated by sex, location, ethnicity, age, and economic groups in Lao PDR, 2017

Source: Adapted from the Lao Social Indicator Survey (II) (2017–2019)

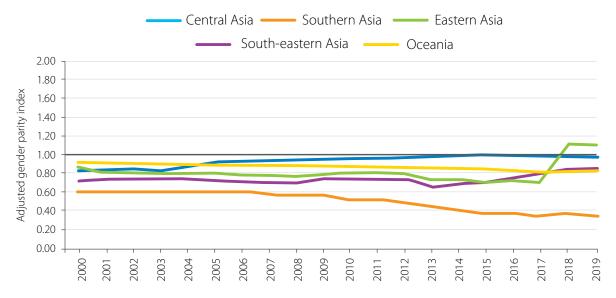
There is extreme disparity in tertiary education attendance among the poorest households. Less than five people from the poorest families for every 100 people from the richest families attend tertiary education in some countries.

There are large disparities in tertiary education attendance by location and wealth in many parts of the Asia-Pacific, favouring people from urban areas and wealthy families. In countries such as Lao PDR, Mongolia and Timor-Leste,

less than 20 people from rural areas for every 100 people from urban areas attend tertiary education. Disparity by wealth is the most extreme. In countries such as Lao PDR, Myanmar, Pakistan, and Timor-Leste, less than five people from the poorest families for every 100 people from the richest families attend tertiary education.

Gender disparity appears less pronounced than disparity by location or wealth. However, this may vary by countries' development status.

Figure 26. Adjusted gender parity index for the proportion of 15–24-year-olds enrolled in vocational education by sub-regions, 2000–2019



Source: UIS Database (Nd.)

Note: An Adjusted Gender Parity Index (GPIA) compares females and males where a value of less than '1' represents disparity in favour of males and a value greater than '1' represents disparity in favour of females. The adjusted parity index is limited to a range between '0' and '2'. A value of 0.97–1.03 indicates parity between the two groups.

In low-income countries men are more likely to attend tertiary education as opposed to women in the majority of lower-middle-income and upper-middle-income countries. For example, in Tajikistan, 38 women for every 100 men attend tertiary education, while in the Maldives, women are about 1.4 times more likely to attend tertiary education compared to men.

Assessing Equity in Education Finance

Some countries, especially lower-middle income ones, still spend less than 4 per cent of GDP and less than 15 per cent of their budget on education.

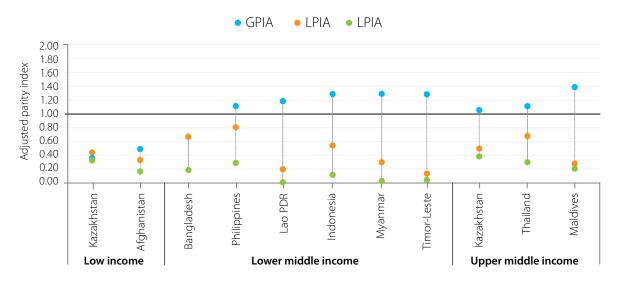
The Education 2030 Framework for Action encourages countries to allocate at least 4–6 per cent of their GDP and 15–20 per cent of public expenditure to education (UNESCO, 2015). In countries with available data such as Afghanistan and Macao SAR, China, spending targets were met as public financing of

education increased between 2015 and 2018. However, as displayed in Figure 28, seven out of 20 countries with available data are still below both benchmarks as of 2019. Lowermiddle income countries, including Cambodia, Bangladesh, Myanmar, Pakistan, and Papua New Guinea, struggle to mobilize sufficient domestic resources for education. Moreover, in some lower-income countries, households provide a large share of education expenditure, putting a heavy burden on families. For example, in Indonesia data from 2015 show that household spending on education accounted for 3 per cent of the GDP, compared to 4 per cent for government spending on education.

Key Highlights and Remaining Challenges

Disparity by gender, wealth and location can already be identified in early childhood education. However, there is also a widening gap in access and learning throughout the course of basic education.

Figure 27. Adjusted parity indices (sex, location, and wealth) for gross attendance ratio in tertiary education in selected countries, latest year

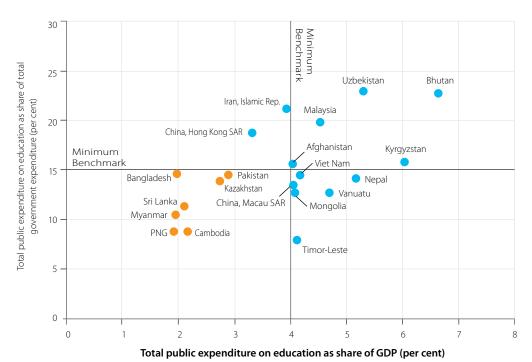


Source: UIS Database (Nd.)

Note: The latest data are available between 2015 and 2019. An Adjusted Gender Parity Index (GPIA) compares females and males, an Adjusted Location Parity Index (LPIA) compares rural and urban location, and an Adjusted Wealth Parity Index (WPIA) compares the poorest 10 per cent of a population and the richest 10 per cent of a population. A value of less than '1' represents disparity in favour of the category in the denominator (males for GPIA; urban for LPIA; richest quintile for WPIA). A value greater than '1' represents disparity in favour of the numerator category (females for GPIA; rural for LPIA; poorest quintile for WPIA). The adjusted parity index is limited to a range between '0' and '2'. A value of 0.97–1.03 indicates parity between the two groups.

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Figure 28. Public education expenditure as share of GDP and total public expenditure in selected countries, 2019 or latest



Source: UIS Database (Nd.)

Note: The latest data are available between 2015 and 2019. An Adjusted Gender Parity Index (GPIA) compares females and males, an Adjusted Location Parity Index (LPIA) compares rural and urban location, and an Adjusted Wealth Parity Index (WPIA) compares the poorest 10 per cent of a population and the richest 10 per cent of a population. A value of less than '1' represents disparity in favour of the category in the denominator (males for GPIA; ruban for LPIA; richest quintile for WPIA). A value greater than '1' represents disparity in favour of the numerator category (females for GPIA; rural for LPIA; poorest quintile for WPIA). The adjusted parity index is limited to a range between '0' and '2'. A value of 0.97–1.03 indicates parity between the two groups.

At upper secondary level, young people from poor households and rural areas are far less likely to attend school in almost all countries in the region, and even for those who do attend school, students from rural areas and poor families are at a disadvantage of learning basic reading and mathematics skills by the end of lower secondary education. At tertiary level, attendance among young people and adults from low-earning families is significantly low. Contrary to disparity by location and wealth, gender gaps appear to be more context-dependent, although TVET programmes tend to attract male students, and the female literacy rate remains low in Southern Asia. While many Asia-Pacific countries are committed to financing education, some lower-middle-income countries are yet to meet the internationally recommended spending threshold for SDG 4.

In order to reduce inequality, it is crucial to eliminate disparities in children's earliest years through measures that are inclusive of children from disadvantaged backgrounds. Moreover, special attention should be given to children and young people from lowincome households and rural areas, especially those at secondary levels, to ensure equity in acquiring fundamental knowledge and skills and complete basic education. While household economic status and geographical location appear to be a primary source of inequality, other factors such as disability, language, and immigrant status should also equally receive attention, starting with more detailed data collection. Furthermore, targeted intervention on adult education, especially for women in Southern Asia, may increase literacy. TVET and tertiary education should equally welcome both female and male students, while reducing barriers to gender equality in enrolment. Finally, to realize the mission of SDG 4 to ensure quality education and learning while leaving no one behind, further financial commitment in education is encouraged, especially in response to the impact of COVID-19.

TARGET 4.6

Target 4.6: Youth and Adult Literacy and Numeracy

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

Literacy and numeracy are fundamental human rights and are essential for quality learning, decent work, health, well-being, and participation in society. Target 4.6 shows a renewed global commitment to universal literacy and numeracy for youth and adults, and emphasizes the importance of achieving proficiency to use literacy and numeracy skills in daily life.

Various youth and adult literacy programmes, as well as advocacy and capacity development initiatives, have been implemented in the Asia-Pacific to address Target 4.6. Over the past five years, youth and adult literacy rates have increased in the region. However, significant concerns remain in reaching this target, such as a large proportion of illiterate young people in Southern Asia.

Progress Assessment

People with low socio-economic status are far less likely to achieve proficiency in functional literacy skills²⁵ compared to the national average.

Among 11 countries with data, the proportion of youth and adults achieving at least the fixed level of proficiency in functional literacy skills ranges from 51 per cent in Bangladesh to 95 per cent in Viet Nam. Figure 29 shows that in countries where disaggregated data are available, gender disparity remains relatively

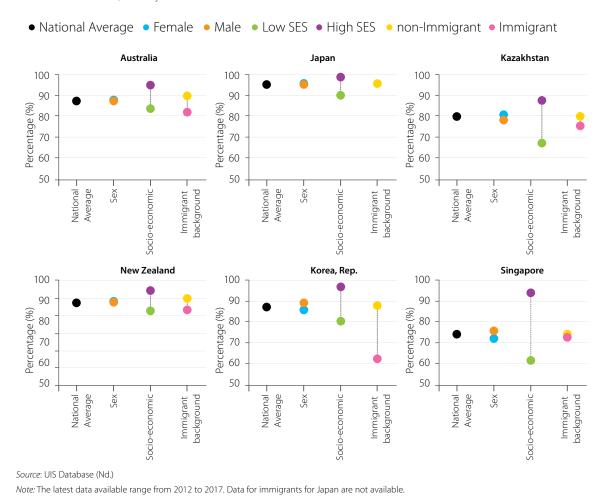
25 The concepts of functional literacy and functional numeracy are based on the UNESCO definitions which cover a continuum of proficiency levels rather than a dichotomy. A person is functionally literate if they can engage in all those activities in which literacy is required for the effective functioning of their group and community and also which enables them to continue to use reading, writing and calculation for their own and the community's development (UIS, 2018). small. In terms of immigrant background, a larger share of non-immigrants generally achieved at least the minimum proficiency level than immigrants. In the Republic of Korea, 88 per cent of non-immigrants achieved at least a fixed level of proficiency in functional literacy skills, compared to 62 per cent of immigrants.

Disparity by SES appears more significant than disparity by gender and immigrant background. People with high SES are far more likely to achieve at least a fixed level of proficiency in functional literacy than those with low SES. In Singapore, 94 per cent of those with high-SES achieved the minimum benchmark of basic knowledge in functional literacy skills, compared to 61 per cent of those with low-SES.

A smaller share of people with low socio-economic status achieve the minimum fixed level of proficiency in functional numeracy skills.

In six countries where data on functional numeracy skills are available, there is a smaller proportion of the population who achieved at least a fixed level of proficiency in functional numeracy skills than functional literacy skills. In Australia, 80 per cent of youth and adults are above the fixed proficiency level of functional numeracy skills, while the figure stands at 87 per cent for functional literacy skills. In terms of gender, men are slightly more likely to achieve at least a fixed level of proficiency in functional numeracy than women in some countries. In Singapore, 75 per cent of men achieved the minimum benchmark of basic knowledge in functional numeracy skills, compared to 69 per cent of women.

Figure 29. Proportion of population achieving at least a fixed level of proficiency in functional literacy skills in selected countries, latest year



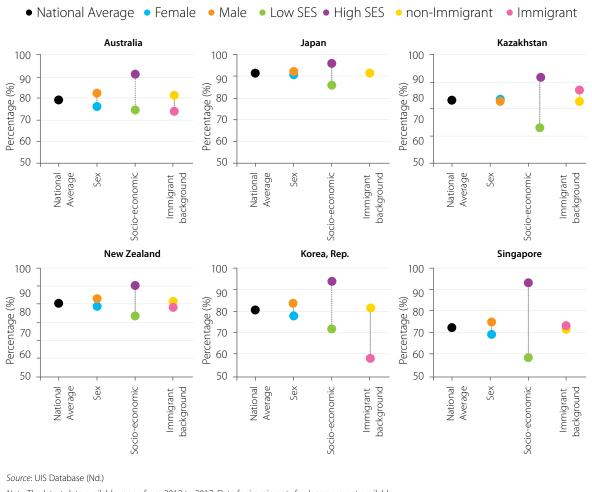
Unlike in functional literacy skills, immigrants are more likely to achieve at least a fixed level of proficiency in functional numeracy than non-immigrants in some countries. In Kazakhstan, 77 per cent of immigrants achieved at least the minimum threshold of proficiency in functional numeracy, while the figure is 73 per cent for non-immigrants. Similar to functional literacy skills, people with high SES are far more likely to achieve at least a fixed level of proficiency in functional numeracy than those with low SES. In Singapore, 93 per cent of high-SES people achieved the minimum benchmark of basic knowledge in functional numeracy skills, compared to 59 per cent of those with low-SES.

While youth and adult literacy rates²⁶ have continuously been rising in the region over the past years, the lowest youth and adult literacy rates are observed in Southern Asia.

An increasingly large proportion of youth are able to read and write, at least at a basic level, in many parts of the Asia-Pacific. In Central Asia and Eastern Asia for instance, literacy rates for the youth population aged 15 to 24 years stood at 100 per cent between 2015 and 2019.

²⁶ The literacy rate measures the ability to read and write a 'simple statement about everyday life' and is therefore an indicator of the presence or lack of minimum literacy skills in a population (UIS, 2018).

Figure 30. Proportion of population achieving at least a fixed level of proficiency in functional numeracy skills in selected countries, latest year



Note: The latest data available range from 2012 to 2017. Data for immigrants for Japan are not available.

In South-eastern Asia, the youth literacy rate increased from 97 to 98 per cent during this period. Southern Asia has also made significant strides since 2000, where the youth literacy rate increased from 87 to 90 per cent between 2015 and 2019. Nonetheless, it still remains below the global average of 92 per cent in 2019. Almost the same proportion of adults are as literate as young people in many parts of the region. In Central Asia, the adult literacy rate stood at 100 per cent between 2015 and 2019. The rate grew from 96 to 97 per cent in Eastern Asia and from 93 to 94 per cent in Southeastern Asia during the same period. On the other hand, the adult literacy rate is 74 per cent in 2019 in Southern Asia, which is below the global average of 86 per cent, although the rate increased by 4 percentage points since 2015.

Among 27 million illiterate youth in the region, more than 95 per cent are from Southern Asia.

The Education 2030 Framework for Action calls for equipping all young people and a substantial proportion of adults with basic literacy and numeracy skills (UNESCO, 2015). Among countries where data are available, 97 per cent of illiterate youth in the Asia-Pacific are from

Figure 31. Youth (15-24 years) and adult (15+ years) literacy rates by sub-region, 2000-2019

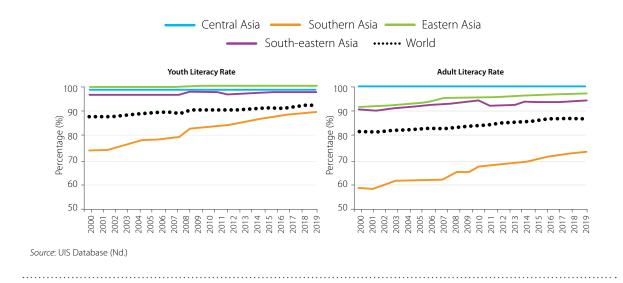
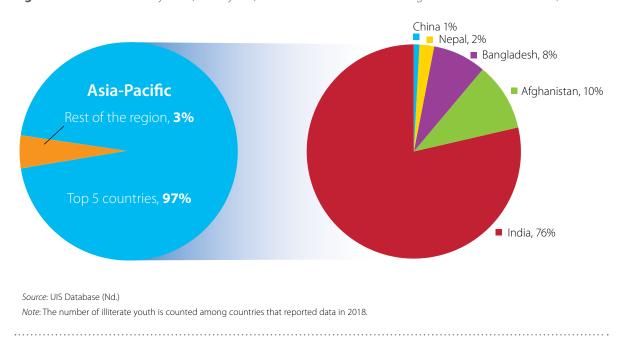


Figure 32. Share of illiterate youth (15–24 years) in the five countries with the highest rate in the Asia-Pacific, 2018.



India (76 per cent), Afghanistan (10 per cent), Bangladesh (8 per cent), Nepal (2 per cent), and China (1 per cent) based on data from 2018. Figure 33 shows that in Afghanistan and Bangladesh, where disaggregated data on youth literacy rates are available, women, people from rural areas, and from the poorest families are less likely to be literate than the national average.

In Afghanistan, where the average youth literacy rate is 64 per cent, only 29 per cent of young women are literate. In Bangladesh, while the national average of youth literacy rate stands at 95 per cent, the figure is 72 per cent for people from the lowest-earning family. It is also important to note that small countries such as Timor-Leste may have a small number of illiterate youth, standing at around 45,000

 National Average
 Female
 Male
 Rural
 Urban
 Poorest
 Richest Afghanistan Bangladesh 100 100 90 90 80 80 Percentage (%) 70 Percentage (%) 60 60 50 50 40 40 30 30 20 20 10 10 0 0 Location National Sex Wealth National Sex Wealth Location Average Average Source: WIDF (2020) Note: Data for Afghanistan refer to DHS, 2015 and for Bangladesh MICS, 2013.

Figure 33. Youth literacy rates in Afghanistan and Bangladesh, latest year.

as of 2018, yet the youth literacy rate stands at only 84 per cent, which is lower than in Bangladesh, India, and Nepal, where there is a larger number of illiterate young people.

Key Highlights and Remaining Challenges

It appears that the level of functional literacy and numeracy skills is largely associated with SES, as opposed to other characteristics such as gender and immigrant status. Those with low SES are far less likely to achieve the minimum proficiency level in both functional literacy and numeracy skills. In addition, people are slightly more likely to achieve the minimum proficiency level in functional literacy skills than functional numeracy skills. In recent years, youth and adult literacy rates have increased in the Asia-Pacific. Yet a large proportion of illiterate young people remain in Southern Asian countries such as India, Afghanistan, Bangladesh, Nepal, and of this population, women, youth from rural areas, and poorest families are less likely to be literate.

Increased efforts are needed so that illiterate youth, especially women, those from lowincome families and rural areas in Southern Asia, can acquire a basic foundation of literacy and numeracy skills. Moreover, the data underscore the need to support people from low SES to acquire functional literacy and numeracy skills to fully engage in even more satisfying and productive lives at home, school and work. At present, only a few Asia-Pacific countries are able to report internationally comparable data on the proportion of population with the minimum proficiency in functional literacy and numeracy skills, while none of the countries have data on the participation rates of illiterate youth and adults in literacy programmes. Asia-Pacific countries are therefore encouraged to further expand data collection on literacy learning and skills.

EDUCATION FOR SUSTANABLE DEVELOPMENT AND COSAL CHERSHIP

Target 4.7: Sustainable Development and Global Citizenship

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 4.7 envisions education for social transformation. It calls upon all learners to acquire the knowledge, skills, values, and attitudes that are vital for peaceful and sustainable societies. This target encompasses Education for Sustainable Development (ESD) as well as Global Citizenship Education (GCED). In order to fulfil this target, themes such as education for peace and non-violence, human rights, well-being and health – including sexual and reproductive health – sustainable lifestyles and cultural diversity, should all be integrated into curricula, teaching, assessments and policies.

The 3rd Asia-Pacific Meeting on Education 2030 (APMED 2030) in 2017 emphasized that the region requires clarifications on key concepts related to Target 4.7, as well as greater technical support and political commitment so that it can be mainstreamed and operationalized from early childhood to higher education, as well as in non-formal education for children, adolescents, youth and adults, while maintaining a strong equity and gender lens.

Progress Assessment

Policies and curricula widely address concepts related to environmental sustainability, good health and well-being, and human rights, yet terms related to economic sustainability, gender equality, and culture of peace and non-violence are few and far between.

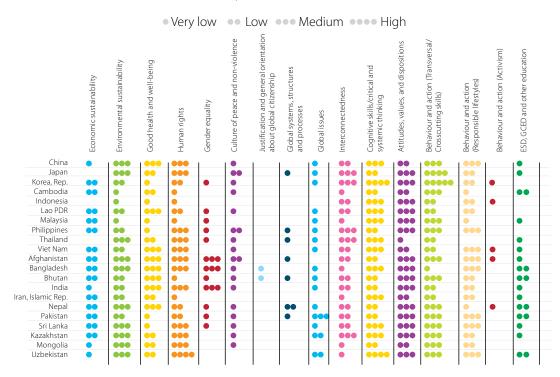
According to a study conducted in 22 Asia-Pacific countries in 2017 (UNESCO-MGIEP, 2017),²⁷ national policies and curricula reflect concepts related to ESD and GCED to varying degrees in the region (Indicator 4.7.1). In particular, concepts such as environmental sustainability, good health and well-being, and human rights are widely addressed, indicating a high level of national commitment towards the attainment of knowledge, skills, and attitudes related to these concepts. However, there are other topics that are underrepresented such as economic sustainability, gender equality, and a culture of peace and non-violence. The study provided the following insights:

Concepts related to **economic sustainability** were integrated to a very low extent in national education policies and curricula in 19 countries. However, this concept was absent in Indonesia, Japan and Thailand.

In terms of **gender equality**, concepts were moderately prevalent in national education policies and curricula in countries such as Afghanistan, Bangladesh and India, but were either neglected or integrated to a low extent in the remaining countries in the study.

²⁷ Key education policy and curricular documents were collected from 22 Asia-Pacific countries, and a total of 172 documents (including national curriculum frameworks and Grades 4 and 8 subject curricula) were analysed using a common coding scheme adapted from previous UNESCO studies (UNESCO-MGIEP. 2017).

Figure 34. Extent to which concepts of Education for Sustainable Development and Global Citizenship Education are addressed in national education policies and curricula in selected countries, 2017



Source: UNESCO-MGIEP (2017)

Note: The 5-scale data as presented in UNESCO-MGIEP (2017) are coded into 0 (absent) to 4 (high), and each main category's subcategories added up to a total category value, and then divided by the number of subcategories. The resulting, weighted and rounded up, total value is represented by a dot.

Among the 17 countries, the concepts of a culture of peace and non-violence in education policies and curricula were featured to a very low extent, and were absent in Indonesia, the Islamic Republic of Iran, Malaysia and Uzbekistan (Figure 34).

Furthermore, concepts related to justification and general orientation about **global citizenship,** global systems, structures and processes, and behaviour and action (activism) are absent in many countries' national education policies and curricula in the region.

A large proportion of schools offer life skills-based HIV and sexuality education in many parts of the Asia-Pacific, but more efforts are needed to include them in the formal curriculum or extra-curricular activities in some countries.

Among countries with available data, a large proportion of schools provide life skills-based HIV and sexuality education within the formal curriculum or as part of extra-curricular activities. In China, Macao SAR, the Philippines, Samoa and Thailand, it is offered by all primary to upper secondary schools.

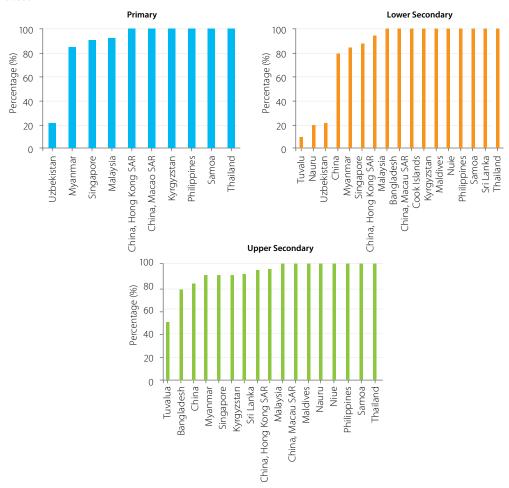
However, in some countries life skills-based HIV and sexuality education is not fully integrated in the formal curriculum or extra-curricular activities. In Uzbekistan for instance, 21 per cent of primary schools and lower secondary schools provide life skills-based HIV and sexuality education to students. A similar case is found in Tuvalu, where 9 per cent of lower secondary schools and 50 per cent of upper secondary schools offer life skills-based HIV and sexuality education, and in Nauru where it is offered in 20 per cent of lower secondary schools.

0X 3

Indicator 4.7.1 upgraded from Tier 3 to Tier 2

On 4 December 2019, the United Nations Inter-agency and Expert Group on the SDG Indicators (IAEG-SDGs) approved an upgrade of indicator 4.7.1 (the extent to which policy and curricula reflect key concepts of SDG 4.7) from Tier 3 to Tier 2. Now that the methodology is agreed upon, data collection at the international level can begin. Since then, no more SDG 4 indicators are in Tier 3, meaning that methodologies have advanced significantly in the last five years and more countries are able to produce and disseminate them.

Figure 35. Percentage of schools providing life skills-based HIV and sexuality education in selected countries, 2019 or latest.



Source: UIS Database (Nd.)

Note: The latest data available range from 2017 to 2019.

The proportion of students with the minimum proficiency level in science varies widely in the Asia-Pacific ranging from 68 per cent in the Philippines to 98 per cent in Hong Kong (SAR of China).

According to the 2018 PISA results, among participating Asia-Pacific countries, more than 90 per cent of 15-year-old students achieved at least the minimum proficiency level in environmental science in Hong Kong (SAR of China) (98 per cent), Brunei

Darussalam (97 per cent), Singapore (95 per cent), Kazakhstan (92 per cent), and Japan (91 per cent). However, the share of students who reached the minimum proficiency in science remains low in other countries. In the Philippines, 68 per cent of students aged 15 years have the minimum proficiency level in science, as opposed to 72 per cent in Malaysia and Thailand.

Key Highlights and Remaining Challenges

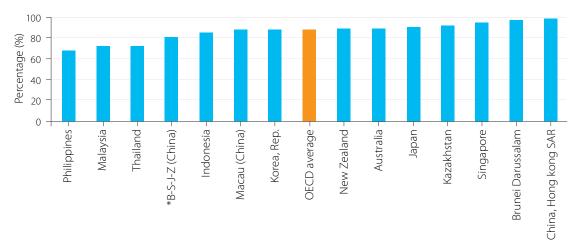
Concepts related to environmental sustainability, good health and well-being, and human rights are widely addressed in national policies and curricula among Asia-Pacific, while terms related to economic sustainability, gender equality, and a culture of peace and non-violence were absent.

Life skills-based HIV and sexuality education are practiced in the majority of primary and secondary schools in Asia-Pacific countries with available data. However, more efforts are needed to include them in the formal curriculum or extra-curricular activities at secondary level in some countries.

Students, especially those from higher-income economies, demonstrate the capacity to understand environmental concerns from a scientific perspective. Among Asia-Pacific countries, however, Malaysia, the Philippines and Thailand have a relatively lower proportion of 15-year-old students achieving at least a minimum proficiency level in environmental science.

Further commitment is needed to mainstream Target 4.7 in national education policies and curricula so that knowledge, skills, values, and behaviours related to ESD and GCED are practiced in teaching and learning in more Asia-Pacific countries. Moreover, only a few countries in the region currently collect data on Target 4.7, and internationally comparable data related to this target remains limited. Methodological development and consensus on definitions of ESD, GCED, and other core concepts will require further attention to monitor progress towards achieving Target 4.7.





Source: OECD (2019)

Note: *B-S-J-Z (China) stands for Beijing, Shanghai, Jiangsu and Guangdong.



Target 4.a: Education Facilities and Learning Environments

Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.

School environments that are safe, inclusive, and equipped with decent services and facilities play a key role in enhancing the quality of education both in terms of the academic performance and psychosocial well-being of students. Countries in the Asia-Pacific are increasingly keen on making schools more conducive to learning by investing in creating a holistic school environment, ranging from infrastructure and resources, to the physical safety and psychological well-being of students. However, there is a wide disparity in access to adequate school services and facilities based on a country's economic status. While schools have become increasingly safe places for everyone, bullying and violence is still prevalent in some countries in the region.

Progress Assessment

Primary schools in lower-income countries are likely to lack basic services and facilities, as well as accessibility features for students in many Asia-Pacific countries

In terms of access to electricity, almost all schools in high-income countries and the majority of upper-middle-income countries have regularly and readily available sources of power that enable the adequate and sustainable use of ICT infrastructure for educational purposes. However, access to electricity in schools remains limited in low-income and lower-middle-income countries. In particular, the share of schools with access to electricity is smaller in primary education than in secondary education.

In Bangladesh for instance, 43 per cent of primary schools have access to electricity as opposed to 93 per cent of lower and upper secondary schools. Despite limited access to electricity in schools in those countries, an increasing proportion of schools have access to electricity in some countries today. For instance, in India, the share of schools with access to electricity increased from 47 to 65 per cent in primary education, from 63 to 78 per cent in lower secondary education, and from 89 to 92 per cent in upper secondary education between 2016 and 2019.

While high-income countries have a large share of schools where the **Internet and computers** are available for pedagogical purposes, a smaller share of schools has access to the Internet and computers in many lower-middleincome and some upper-middle-income countries, especially in primary and lower secondary schools. For instance, in Samoa, 33 per cent of primary and lower secondary schools have access to the Internet and 15 per cent of them have access to computers, but these are available in all upper secondary schools. Countries like China increased the share of primary schools with access to the Internet and computers: those with the Internet increased from 86 to 98 per cent and those with computers increased from 89 to 98 per cent between 2016 and 2019.

More schools have adapted **infrastructure and materials for students with disabilities** in the past years. For example, in Macao (SAR of China), 78 per cent of primary schools have adapted

infrastructure and materials for students with disabilities. In upper secondary education, the percentage of schools with accessibility functions increased from 12 to 19 per cent in Bangladesh, 92 to 94 per cent in Hong Kong (SAR of China) and 50 to 64 per cent in India between 2016 and 2019. However, the share of schools at lower levels of education with these functions remains smaller – even among some high-income countries The situation fares worse in lower-middle-income and upper-middleincome countries. In Kazakhstan for instance, only 7 per cent of primary schools, 12 per cent of lower secondary schools, and 77 per cent of upper secondary schools have disability-friendly infrastructure and materials.

In high income countries, all schools are equipped with basic drinking water, singlesex basic sanitation facilities, and basic handwashing facilities at all levels of education. While basic drinking water and sanitation facilities are generally also available in many schools in other countries, especially in secondary education, access to handwashing facilities remains limited among many low-income and lower middle-income countries. In Afghanistan, 5 per cent of primary schools, 8 per cent of lower secondary schools, and 13 per cent of upper secondary schools have adequate handwashing facilities. While the figure for primary schools increased from 3 to 5 per cent between 2016 and 2018, the vast majority of schools still does not have decent handwashing facilities.

More than one-third of students have been bullied in school in the majority of Asia-Pacific countries, and boys are more likely to experience bullying than girls.

In 20 out of 23 countries with the latest available data, more than 30 per cent of students reported experiencing bullying in school. The highest proportion was reported by 79 per cent of students in the Islamic Republic of Iran, and the lowest proportion was reported in Lao PDR by 13 per cent of students. In all countries except the Cook Islands, the Republic of Korea, and Vanuatu, boys are more likely to experience bullying than girls. For instance, in Sri Lanka, 50 per cent of boys experienced bullying as opposed to 29 per cent for girls. Data show a similar case in Tonga, where 46 per cent of boys experience bullying as opposed to 31 per cent of girls.

Physical bullying is the most frequent type of bullying reported by both boys and girls, and its prevalence is higher among boys than among girls in the Asia-Pacific. While boys are more likely to report bullying related to race, nationality, or colour, girls are more likely to report physical appearance and religion as the main drivers for bullying (UNESCO, 2019a).

Many Asia-Pacific countries have seen a decline in the prevalence of violence against students, teachers, and institutions, but an increasing number of attacks on education are reported in some countries.

Between 2013 and 2019, the number of attacks against students, teachers, other personnel, or education facilities decreased in six out of eight Asia-Pacific countries with available data. This number increased from 38 to 102 in India and from 8 to 65 in Myanmar during the same period. In 2019, the highest number of attacks was reported in Afghanistan (113), India (102), and Myanmar (65).

Key Highlights and Remaining Challenges

Schools in high-income countries are widely equipped with the adequate services and facilities outlined in SDG 4 requirements, but this is not the case in lower-income countries, especially in primary schools. The share of schools with accessibility features for students with disabilities remains small among countries of all economic levels.

O Low income O Lower-middle income O Upper-middle income O High income Primary 100 90 80 70 60 50 40 30 20 10 0 00 00000 Percentage (%) With basic handwashing facilities Access to internet for Access to electricity pedagogical purposes Access to computers for pedagogical purposes Access to adapted infrastructure and materials with disabilities With single-sex basic sanitation facilities Access to basic drinking water **Lower Secondary** 100 90 80 70 60 50 40 30 20 9 Percentage (%) With basic handwashing facilities Access to electricity – pedagogical purposes pedagogical purposes Access to adapted infrastructure Access to internet for Access to computers for and materials with disabilities With single-sex basic sanitation facilities Access to basic drinking water Upper Secondary 100 90 80 70 60 50 40 30 20 10 0 00000 Percentage (%) φ Access to adapted infrastructure Access to internet for pedagogical purpose Access to electricity — With basic handwashing facilities pedagogical purposes With single-sex basic_ and materials with disabilities sanitation facilities Access to basic drinking water

Figure 37. Proportion of schools offering basic services in selected countries, 2019 or latest

Source: UIS Database (Nd.)

Note: The latest data available range from 2016 to 2020. Income grouping is based on the 2019 World Bank income classifications.

Figure 38. Percentage of students who experienced bullying in the last 12 months in selected countries, 2018 or latest

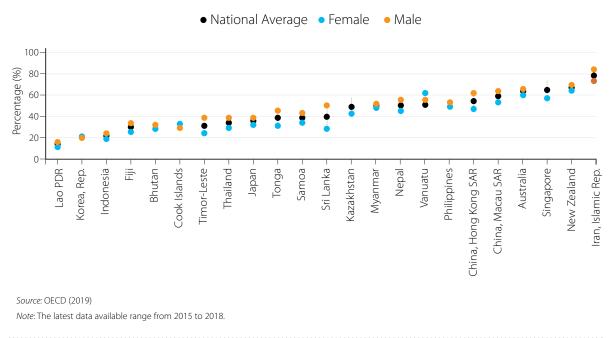
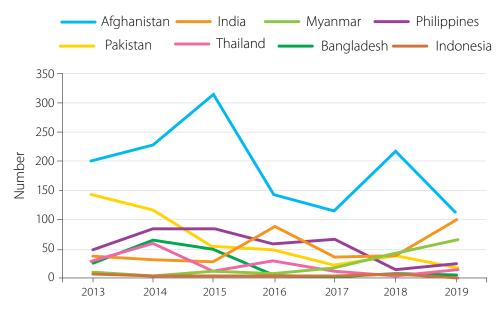


Figure 39. Number of attacks on students, personnel, and institutions in selected countries, 2013–2019



Source: UIS Database (Nd.)

Note: The indicator focuses on attacks carried out for political, military, ideological, sectarian, ethnic or religious reasons by armed forces or non-state armed groups. Attacks on education include the following subcategories: attacks on schools, attacks on students, teachers, and other education personnel, military use of schools and universities, recruitment of children at schools or along school routes, sexual violence by parties to the conflict, and attacks on higher education (UIS, 2018).

In terms of school bullying and safety, many children, especially boys, have experienced school bullying in the region. While the number of attacks against students, teachers, and institutions has been on the decrease in the past years, violence on education is still prevalent in some countries such as Afghanistan, India and Myanmar.

It is crucial for Asia-Pacific countries, especially lower-income countries, to invest in a school environment that is safe and provides key basic services and facilities to ensure learning, especially in response to the COVID-19 crisis. Moreover, there is currently a dearth of countries that report data on Target 4.a. Increasing efforts in tracking the progress of this target is urgently required.





Target 4.b: Scholarships

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.

Scholarships offer the opportunity to access tertiary education for those who would otherwise be deprived of it. International scholarship programmes can promote cross-border education that enriches students' experience, they foster diversity, tolerance, and cross-cultural understanding, as well as strengthen the capacity of the workforce and help shape international leaders. In order to increase access to such opportunities, Target 4.b calls for increasing funding for scholarships, particularly for students in developing countries.²⁸

Progress Assessment

Asia-Pacific countries received about US\$404 million of ODA for scholarships in 2018, a US\$23 million increase since 2015.

In the Asia-Pacific, the volume of ODA for scholarships was on the increase until around 2011. However, it has steadily decreased over the last years and increased again since 2017. In 2015, US\$381 million in scholarships were provided in the region – equivalent to 48 per cent of the total global ODA funding for scholarships. In 2018, youth and adults in 41 Asia-Pacific countries received around US\$404 million of ODA for scholarships, which accounted for almost 46 per cent of scholarship aid worldwide.

About 76 per cent of the scholarship aid were given to lower-middle-income countries in the region.

76 per cent of ODA for scholarships in the region was provided to lower-middle-income countries in 2018, followed by 19 per cent to upper-middle-income countries and 5 per cent for low-income countries. The Philippines received US\$84 million of scholarship aid, which is the largest volume in the region. The other major recipient countries were Indonesia (US\$55 million), Viet Nam (US\$31 million), China (US\$23 million) and India (US\$20 million).

While overall 21 out of 40 Asia-Pacific countries received a lower volume of scholarship aid since 2015, some countries in Oceania have received more. Among 19 countries where ODA funding for scholarships increased between 2015 and 2018, seven were in Oceania. The highest increase is seen in Samoa where ODA for scholarships increased from US\$6 million to US\$8 million between 2015 and 2018. The volume of scholarship aid also increased from US\$3.1 million to US\$3.6 million in Kiribati during this period.

The extent to which international scholarship programmes promote cross-border educational opportunities varies by country context. Tertiary students from Asia-Pacific countries that receive a large volume of scholarship aid could be more likely to study abroad in some countries. In countries such as Bangladesh and Pakistan, where a large volume of scholarship aid is

²⁸ Scholarships are financial aid awards for individual students and contributions to trainees. The beneficiary students and trainees are nationals of developing countries. Financial aid awards include bilateral grants to students in institutions of higher education following full-time studies or training courses in the donor country (UIS, 2018).

Figure 40. Volume of official development assistance flows for scholarships (in constant US\$), 2006–2018

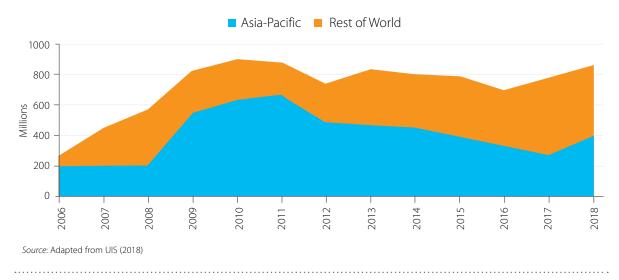
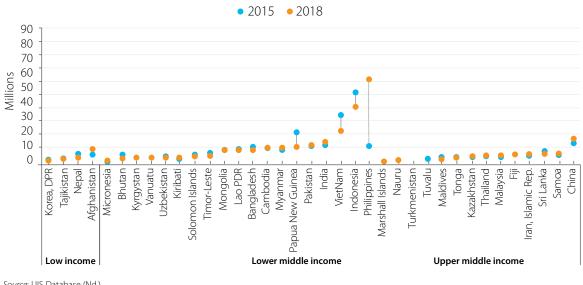


Figure 41. Volume of official development assistance flows for scholarships (in constant US\$) in low-income, lower middle-income, and upper middle-income countries, 2015 and 2018



Source: UIS Database (Nd.)

Note: Income grouping is based on the 2019 World Bank income classifications

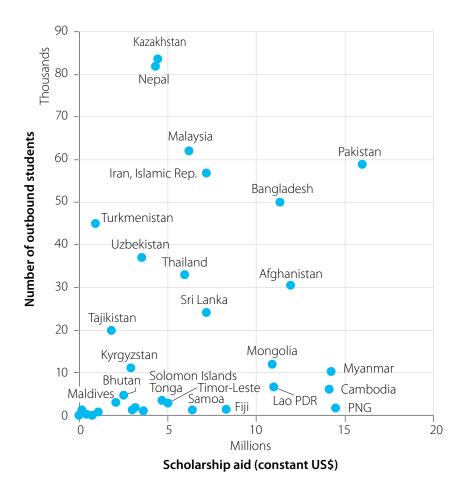
received, many tertiary students are studying in foreign countries. However, other countries such as Cambodia, Myanmar and Papua New Guinea have a lower number of tertiary students studying overseas while they receive a large volume of ODA for scholarships. Moreover, in countries such as Kazakhstan and Nepal, the number of outbound internationally mobile students is high, even though young people

and adults in these countries receive a smaller volume of scholarship aid.

Key Highlights and Remaining Challenges

Between 2015 and 2018, ODA for scholarships increased from US\$381 million to US\$404 million in the Asia-Pacific. Target 4.b calls for the increasing number of scholarships available, particularly for least developed countries.

Figure 42. Relationship between the volume of official development assistance flows for scholarships and total outbound internationally mobile tertiary students studying abroad in selected countries, 2018



Source: UIS Database (Nd.)

Note: Outliers (China, India, Indonesia, the Philippines and Viet Nam) are excluded from analysis. This is not a causal relationship and the population size of tertiary education students, as well as the availability of other types of scholarships and self-funded study abroad, have to be taken into account. particularly for least developed countries.

However, only 5 per cent of ODA for scholarships in the region was provided to low-income countries in 2018. The major recipient countries in the region are Indonesia, the Philippines and Viet Nam. Despite the decreasing trend in funding for scholarships in the region, students in Oceania, such as Kiribati and Samoa, received more scholarship aid in recent years. The data suggest that scholarship aid may have facilitated cross-border education for youth and adults in some lower-middle-income countries in the region.

While Target 4.b is to be met by the target year of 2020, continuous efforts to expand scholarship aid to low-income countries are encouraged in the region. Moreover, further data collection on the volume of ODA flows for scholarships by sector and type of study, as well as the number of higher education scholarships awarded by beneficiary countries in the region, will provide a more nuanced picture of countries' progress towards Target 4.b.



Target 4.c: Teachers

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 islands developing States.

Teachers play a critical role in delivering highquality education and learning outcomes. This is recognized by Target 4.c, which calls on countries to train more teachers and ensure that they meet the qualifications set by national standards. In the Asia-Pacific, various initiatives have taken place to enhance the capacity of teachers and empower the teaching profession to be an attractive career pathway. A large proportion of teachers have been trained and qualified over the past years and fewer teachers leave the profession in basic education. Nonetheless, challenges remain with regard to the shortage of trained and qualified teachers as well as attracting and retaining teachers in the profession in some countries.

Progress Assessment

A high proportion of teachers are trained with high gender parity in the Asia-Pacific. However, there are fewer trained teachers in some countries in Southern Asia and Oceania.

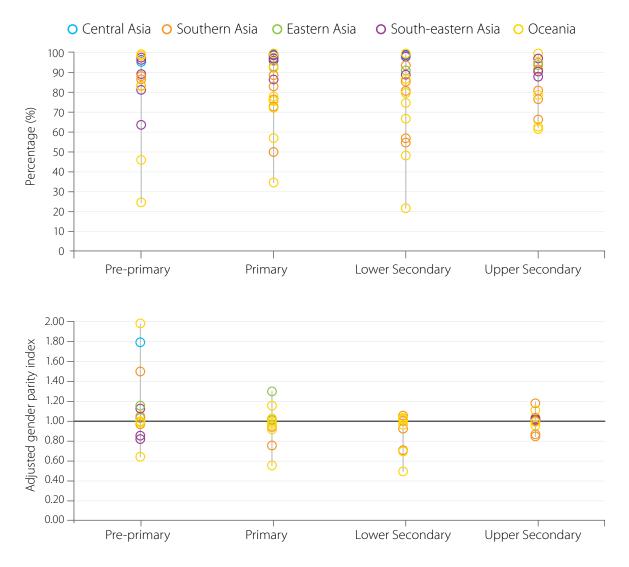
In 2019, more than 90 per cent of teachers received pedagogical training according to national standards in many parts of the Asia-Pacific. By level, this was observed in 17 out of 25 countries in pre-primary education, 23 out of 34 countries in primary education, 13 out of 24 countries in lower secondary education, and 11 out of 19 countries in upper secondary education. An increase in the share of trained teachers is seen in some countries over the past years. For instance, in Macao (SAR of China), the percentage of trained teachers increased in all

levels of education between 2015 and 2019. In primary education, the share of trained teachers increased from 82 per cent to 87 per cent in Brunei Darussalam, 83 per cent to 89 per cent in the Maldives, and 94 per cent to 97 per cent in Nepal during the same period.

In the majority of countries, both female and male teachers are equally trained, and in 22 out of 34 countries, gender parity for the proportion of trained teachers in primary education is met. However, in countries in Southern Asia such as the Maldives, Nepal, and Pakistan, male teachers are more likely to be trained than female teachers from primary to upper secondary education. For instance, in Pakistan, only 75 female teachers for every 100 male teachers are trained in primary education, and 71 female teachers for every 100 male teachers are trained in lower secondary education.

At the same time, the share of the well-trained teaching work force remains small in some countries in Southern Asia and Oceania such as Bangladesh and Pakistan as well as the Marshall Islands, Micronesia, the Solomon Islands, Tokelau, Tuvalu, and Vanuatu where less than 70 per cent of teachers are trained in at least one level of education from pre-primary education to upper secondary education. This is demonstrated in a larger pupil-trained teacher ratio (PTTR) compared to the pupil-teacher ratio (PTR), indicating that students are less likely to be taught by trained teachers.

Figure 43. Percentage of teachers with the minimum required qualifications from pre-primary to upper secondary education and adjusted gender parity index in selected countries, 2019 or latest



Source: UIS Database (Nd.)

Note: The latest data are available between 2015 and 2020. An Adjusted Gender Parity Index (GPIA) compares females and males where a value of less than '1' represents disparity in favour of males and a value greater than '1' represents disparity in favour of females. The adjusted parity index is limited to a range between '0' and '2'. A value of 0.97–1.03 indicates parity between the two groups.

For instance, in the Solomon Islands where only 25 per cent of pre-primary teachers are trained, the PTTR of pre-primary education is 94:1 compared to the PTR of 23:1. This means that one trained teacher teaches 94 pre-primary students, while there are 23 students for every one teacher regardless of their training status. Similarly, in Bangladesh, 50 per cent of primary teachers are trained, and the PTR of primary education is 30:1, but the PTTR is 60:1.

The proportion of qualified teachers has increased in some countries. Yet, there is a shortage of qualified teachers in preprimary education in a few countries.

A high proportion of teachers have national minimum qualifications for teaching their subjects at the relevant education level in many Asia-Pacific countries. More than 90 per cent of

Pre-primary Primary 20 30 40 60 70 **PTR** PTR **Lower Secondary Upper Secondary** 8 40 40 ()**PTR PTR** Source: UIS Database (Nd.)

Figure 44. Pupil-trained teacher ratio in comparison to pupil-teacher ratio from pre-primary to upper secondary education in selected countries, 2019 or latest

teachers are qualified: in 18 out of 28 countries in pre-primary education, in 29 out of 37 countries in primary education, 18 out of 29 countries in lower secondary education, and in 16 out of 26 countries in upper secondary education. There was also an increase in the share of qualified teachers in some countries over the past years. For example, in Nepal, the percentage of qualified teachers increased in all levels of education between 2015 and 2019. In Tuvalu, the share of qualified teachers increased from 62 to 100 per cent in primary education during the same period.

Note: The latest data available range from 2015 and 2020.

Both female and male teachers are generally equally qualified in all levels of education in many countries. However, female teachers are slightly more likely to be qualified than male teachers in some countries. For instance, in Mongolia where 94 per cent of primary teachers are qualified, the GPIA is 1.27, indicating that there are 127 female qualified teachers for every 100 male qualified teachers. A similar case is observed in Afghanistan, where the GPIA for the proportion of qualified primary and lower secondary teachers is 1.14.

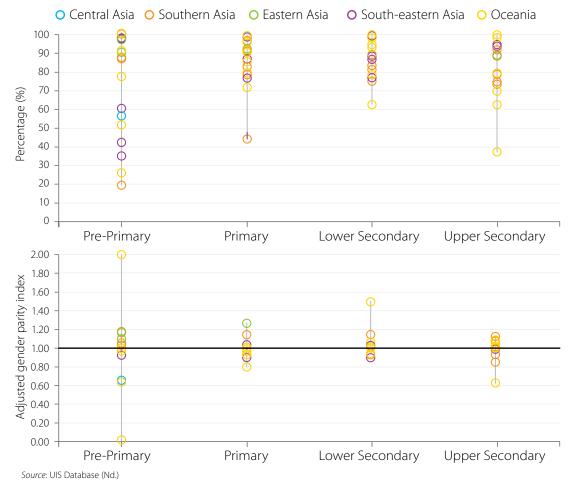
Only a small share of teachers can be considered unqualified in primary and secondary education across the Asia-Pacific. On the other hand, in 6 out of 28 countries such as Lao PDR, the Maldives, the Solomon Islands, Tajikistan, Timor-Leste, and Vanuatu the share of qualified teachers is less than 60

per cent in pre-primary education. The lowest figure is 19 per cent for the Maldives, indicating there is a severe shortage of qualified teachers in pre-primary education in the country. In the Maldives, the PTR is 16:1, but the pupil-qualified teacher ratio (PQTR) is 72:1. Similarly, in Lao PDR, the PQTR of pre-primary education is 43:1, compared to the PTR of 18:1.

Teacher attrition rates in basic education are generally low. Male teachers are far more likely to leave the profession than female teachers in many parts of the Asia-Pacific.

Teacher attrition rates in basic education are generally low across Asia-Pacific countries. While countries such as Kazakhstan and Myanmar have relatively high teacher attrition rates, the figure is less than 5 per cent in primary education in 14 out of 18 countries. In lower secondary education, 6 out of 10 countries with data have less than 5 per cent of teacher attrition rates. While the rates are as high as 8 and 9 per cent in some countries such as Bangladesh and Uzbekistan in upper secondary education, seven out of nine countries have an attrition rate of less than 5 per cent. On the other hand, some countries have high teacher attrition rates in pre-primary education.

Figure 45. Percentage of qualified teachers from pre-primary to upper secondary education and adjusted gender parity index in selected countries, 2019 or latest



Note: The latest data are available between 2015 and 2020. An Adjusted Gender Parity Index (GPIA) compares females and males where a value of less than '1' represents disparity in favour of males and a value greater than '1' represents disparity in favour of females. The adjusted parity index is limited to a range between '0' and '2'. A value of 0.97–1.03 indicates parity between the two groups.

In Malaysia and the Philippines, pre-primary teacher attrition rates are 14 per cent and 19 per cent, respectively.

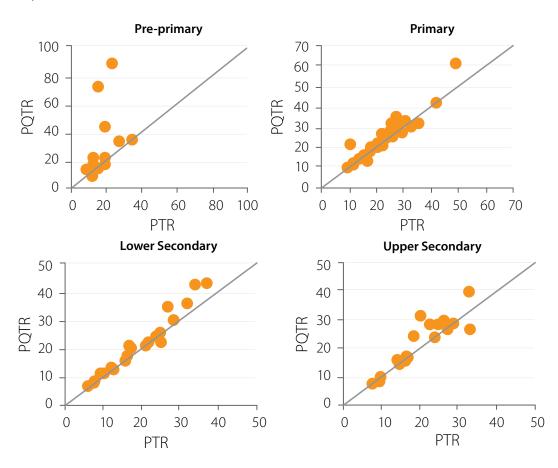
In general, male teachers are far more likely to leave the profession than female teachers at all education levels. Gaps in the teacher attrition rate between female and male teachers are especially high in pre-primary education. For example, in Malaysia, the attrition rate for male teachers was 30 per cent, compared to 14 per cent for female teachers. Similarly, in Lao PDR, 17 per cent of male teachers left their position while the figure was just 1 per cent for female teachers.

Key Highlights and Remaining Challenges

A large proportion of both female and male teachers in the region has been trained and qualified over the past years. However, a smaller share of teachers are trained in some countries in Southern Asia and Oceania, and male teachers are more likely to be trained than female teachers in some Southern Asian countries. Similarly, there are fewer qualified

teachers in pre-primary education in some countries in the region. While teacher attrition rates are low in basic education, some countries report relatively high attrition rates in pre-primary education. In addition, male teachers

Figure 46. Pupil-qualified teacher ratio in comparison to pupil-teacher ratio from pre-primary to upper secondary education in selected countries, 2019 or latest



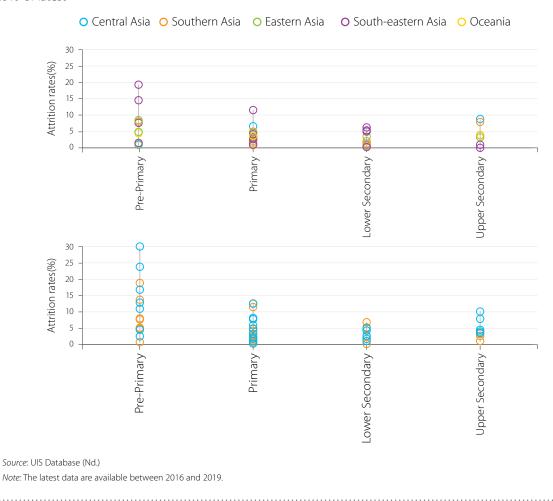
Source: UIS Database (Nd.)
Note: The latest data are available between 2015 and 2020.

are more likely to leave the profession than female teachers in all levels of education, but this tendency is especially prominent in preprimary education in some countries.

The data underscore a need for providing more opportunities for female teachers in Southern Asia to receive pedagogical training, which could increase the share of trained teachers and reduce gender disparity in the trained teaching

force in the sub-region. A relatively large share of unqualified teachers in pre-primary education also indicates that more efforts should be directed to ensuring that teachers in pre-primary education have adequate qualifications. Furthermore, there remains much to be done in order to identify reasons for high teacher turnover and to reduce attrition rates, especially among male teachers in pre-primary education to ensure that children's learning experience is not disrupted.

Figure 47. Teacher attrition rates from pre-primary to upper secondary education in selected countries, 2019 or latest



THEMATIC ANALYSIS OF EQUITY AND INCLUSION

IMPLEMENTATION OF SDG 4 is well underway in the Asia-Pacific region. However, various challenges have to be overcome in order to reach all targets by 2030, an ambition that has been further hampered by the impacts of COVID-19. The following analysis of external and internal barriers, vulnerable groups, as well as the costs and risks of inaction intends to emphasize the urgency that is faced in achieving Education 2030.

Excluded Groups

There are multiple dimensions that affect the implementation of SDG 4. This is very much the case in Asia-Pacific countries, where many learners from vulnerable and marginalized groups face a combination of multiple exclusionary challenges,²⁹ which pose a barrier to equity and inclusion in education. These excluded groups must be considered when evaluating the progress made in the last five years towards SDG 4 implementation:

- **Socio-economic status**: even free education requires additional expenses, which leads to the exclusion of poorer families.
- Location (urban-rural-remote): both access to and quality of education depend on location.

- Language, ethnicity and culture: cultures and traditions tied to a specific group based on language, religion or caste can lead to exclusion from education.
- Refugee, migrant or emergency status: challenges in accessing high-quality education in difficult contexts, extreme poverty.

External and Internal Barriers

These six challenges often lead to the neglect of children, youth and adults who are excluded from organized, quality education – whether formal or non-formal. Too often, those that are already excluded suffer the effects of multi-dimensional exclusion. For example, a member of a repressed minority, a remote community, or a refugee camp is more likely to be excluded from education opportunities – a barrier to inclusion that is only exacerbated by other factors such as disabilities and gender.

In addition to the challenges faced by different population groups in the Asia-Pacific, internal and external barriers can be identified when it comes to equity and inclusion in education.

External barriers may include discrimination against minorities or inadequate policies, affecting education and sectors beyond education.

Excluded groups

Disabilities: difficulties in identification and diagnosis, stigmatization and lack of adequate barrier-free education.

- **Gender**: religious beliefs and cultural traditions may oppose girls' and women's education.
- Socio-economic status: even free education requires additional expenses, which leads to the exclusion of poorer families.
- Location (urban-rural-remote): both access to and quality of education depend on location.
- Language, ethnicity and culture: cultures and traditions tied to a specific group based on language, religion or caste can lead to exclusion from education.
- **Refugee, migrant or emergency status**: challenges in accessing high-quality education in difficult contexts, extreme poverty.

²⁹ Note that Target 4.5 and indicators 4.5.1 and 4.5.2 reflect these categories of excluded learners.

Internal barriers may include the inequitable distribution of education budgets and education content that is not supportive of inclusion – making equity and inclusion within education systems and services even harder to attain.

External Barriers:

Discrimination against difference and diversity

Many societies, for various reasons, do not recognize or willingly accept difference and diversity. This can lead to persons with disabilities being undercounted, to neglect of minority languages, discrimination against minority groups, and stigma against migrants, refugees and IDPs seeking access to education in their host country.

Reluctance to recognize minorities

Discrimination is reflected in the reluctance to recognize minorities in society, including in education. However, such fear with regard to the empowerment of minorities and others who are 'different' may be used to strengthen the hold of governing groups or used as an effective way to maintain authority by denying status to these minorities in the education system.

Inadequate policies, legislation and strategies to mitigate exclusion

Even when tolerance for diversity and difference is accepted in terms of national discourse and rhetoric, in many cases there may be a lack of policies, laws and strategies which genuinely promote and implement inclusion. The national vision may include a focus on diversity and equity, but this does not necessarily lead to affirmative actions, strategies to decrease inequalities, social protection schemes, better education coverage or to a respect for the rights of minorities. Too often, it appears that quotas and other approaches substitute serious transformation of the system toward inclusive education.

Lack of equity-focused budgetary allocations

In many countries, additional funds that are needed to reach those currently excluded from education are not provided in national or local budgets. Fulfilling their needs may have a higher cost than providing education for the rest of the population, who may be unwilling or unable to provide the funds needed to cover them. In addition, many persons excluded from education are invisible due to the lack of an efficient system to identify them. Recent studies undertaken to estimate the adequacy of economic and social policy responses to COVID-19 in Southern Asia suggest there is inefficiency in targeting those that are the most excluded (Shaeffer, 2020).

Internal Barriers:

Inequitable distribution of educational budgets

In many countries in the region, budget allocations from the central level to subnational levels are not necessarily made based on the principles of equity and inclusion. This leads to the impossibility of meeting the higher financial needs of learners with disabilities or those of remote schools. Another challenge is that budgets are often relocated to highlevel academic research rather than to basic education. At the same time, in some cases powerful constituencies tend to be favoured in budget allocation, which may lead to fewer funds that are specifically earmarked for excluded populations.

Lack of awareness as to the extent of exclusion in education

Excluded populations are often small in size, live far away from urban centres and have little political influence, they tend to be 'invisible'. This means that ministries of education are not always aware of the challenges these population groups face. Ministers may know

national averages with regard to primary school enrolment and the youth literacy rate, but they may not know the gap between the literacy rate of urban males speaking the national language at home, or the rate of rural females speaking a mother tongue. This undoubtedly affects access to education, and as a result, the achievement of SDG 4.

Exclusion within the education workforce

Education systems and programmes in the Asia-Pacific are often not inclusive in terms of their own workforce: there are usually few teachers or staff with disabilities, women are over-represented in the teaching profession, with few male teachers at primary level, while they are under-represented in leading roles. More generally, there is significant under-representation of ethnic, linguistic and religious communities. The education profession, in other words, usually does not represent the diversity found in wider society, which in turn influences learners' perspectives.

Educational content and pedagogy are not supportive of inclusion

Exclusion also occurs throughout the education process. Curricula, textbooks, and other learning materials may under-represent or even ignore a nation's diversity. Learning materials sometimes promote stereotypes, exclude those with disabilities or from minorities, and may focus more on the urban context or dominant culture. Teaching methodologies used in the classroom may also reflect elite, majority, or urban values, and teachers are often unable or unwilling to provide individualized instruction or remedial support required of learners from vulnerable groups, therefore contributing to increased inequities when it comes to learning outcomes.

Discriminatory admission and promotion procedures

Discrimination and neglect can lead to difficulties in entering the education system.

For example, children might not pass admissions tests, families might not be able to afford education fees or additional costs, learning programmes might be too far away from a learner's home, or programmes might not be able to work with a learner's developmental delay or disability. Even if members of excluded groups are admitted to education, they might be constrained in how far they can continue and be promoted within the system.

The commercialization of education

The expansion of Public-Private Partnership (PPP) arrangements in education, including fee-paying private schools, is a growing phenomenon in the Asia-Pacific region. In Nepal for instance, private schools continue to grow, and Australia has seen increased funding of private schools and an increased marketization of the education system. This commercialization of education can undermine the public education system and ultimately lead to greater exclusion from good-quality education. In addition, the rapid expansion of private tuition or 'shadow education' (Bray, 2012) in the region is reason for concern in terms of inclusion and equity in education (Shaeffer, 2020).

What are the costs and risks of inaction with regard to equity and inclusion?

If stronger action is not taken to support greater equity and inclusion in education, the Asia-Pacific will likely face serious risks with regard to the achievement of SDG 4. This inaction also results in both direct and indirect costs, as well as significant risks for the region. Inaction in the education sector has many direct and indirect costs: it can lead to increasing socio-economic disparities, threaten social cohesion and national security, deny people the right to participate in society, and neglect the development of 21st century skills. It can also lead to the loss of linguistic and cultural heritage and diversity, as well as further detriment the effects of climate change.

Direct and indirect costs

The actual direct financial costs of inaction to mitigate the factors of exclusion described above also presents a significant risk. Recent data show that failing to address gender equality in the workforce can cause a severe negative impact on aggregate productivity, and a loss of income of 17.5 per cent. In ASEAN countries, these income losses range from 7 per cent in Cambodia to 29 per cent in Brunei Darussalam (UNESCAP, 2018). These are just the economic costs – without counting the social and personal costs.

SDG 4 can ultimately lead to greater competition for scarce resources, increasing the potential for conflict and decreasing social cohesion.

Inaction in education can have severe economic, social and personal costs, leaving millions of youth and adults without basic skills to participate in economic and public life, and negatively impacting productivity and income per capita in a country.

In terms of literacy and adult education programmes, the cost of inaction is also severe, leaving millions of youth and adults without the basic skills to participate effectively in either economic or public life. In fact, the benefits derived from them far outweigh the cost that it entails to implement them. Studies undertaken by the UNESCO Institute for Lifelong Learning (UIL), the Global Campaign for Education, ActionAid International and ASPBAE have demonstrated the estimated costs and benefits of achieving literacy for all (Shaeffer, 2020).

Increasing socio-economic disparities

The region shows increasing disparities in social-economic status (Ibid). While some disparities, such as gender and, to a lesser

extent, disabilities, language or ethnicity are decreasing, others, linked to location, refugee or migrant status, and especially poverty, are increasing. Demographic and climatic changes will likely only increase these disparities in the region and affect the income of mostly disadvantaged people, which will lead to greater levels of exclusion and greater inequities in opportunities.

Such exclusion of entire groups of people from quality education leads to the risk that disadvantage, rather than equal opportunity, will be transmitted from one generation to the next. A recent ESCAP publication also points out that inequality in opportunity is particularly high in the region, resulting in 'a growing divide between those who have and those who have not' (UNESCAP, 2019a). Those affected by multiple exclusionary factors are even more at risk of further marginalization.

While the Asia-Pacific region has made progress in diminishing inequalities in education when it comes to gender, disabilities, language and ethnicity, disparities linked to location, refugee or migrant status, as well as poverty, are increasing.

Threats to social cohesion and national security

An increase in disparities between groups of various kinds (political, ethnic, linguistic, religious, economic, or nationality) can be due partly to inequitable access to quality education. Ultimately, the disparities may well lead to greater competition for scarce resources.

Expected results of these challenges include less social cohesion and more conflict, as well as greater insecurity within and between countries. This can already be seen in disputes among countries over water along great river systems of the region (such as the Indus or the

Mekong) and increases in political populism and resulting nationalistic views, as well as ethnic and religious intolerance (Shaeffer, 2020).

Denial of the right to participate in community and national development

Inaction in the achievement of SDG 4 can ultimately lead to greater competition for scarce resources, increasing the potential for conflict and decreasing social cohesion.

Inaction with regard to ensuring that all children are included in schooling and learning runs the risk that disadvantaged individuals in a community and disadvantaged groups in a nation will be denied the right and ability to take part in economic and social development, both of their own community and of the nation as a whole. Potential contributions of excluded individuals to such development will therefore be lost.

Related to this is the ability and the liberty to participate in civic movements, which is an essential human right. Even though the discussion on political trends earlier in this report has shown that there is a rise in civic movements in the region, inaction in education might mean that those already excluded or discriminated against will struggle even more to fight for their rights.

When people do not access sufficient education to participate in economic and social development, countries lose a valuable contribution to development efforts.

Neglect of 21st century skills

21st century skills, reflected in SDG 4.7, are crucial to ensuring that a country's population is equipped for the labour market of the future. There are two sets of skills here: 1) those needed to challenge, negotiate, and communicate, and 2) the critical cognitive, socio-emotional, and work-related skills.

Both sets of skills are essential to face the political, environmental, economic, social, technological, and labour-market challenges of the future in the Asia-Pacific region. However, many children, youth, and adults are excluded from the educational opportunities needed to help gain these skills, thereby making them less prepared to face these challenges.

Exclusion from educational opportunities means that a lot of learners cannot develop their 21st century skills, which challenges them to join the workforce and leaves whole nations ill-prepared for the future labour market.

The loss of linguistic and cultural heritage and diversity

Another risk of inaction with regard to exclusion is the loss of linguistic and cultural heritage and diversity. This includes the ongoing dying of languages presented earlier in this report, as well as local cultures which are becoming more globalized, often at the expense of diversity and difference.

As with the extinction of species due to the loss of biodiversity, the Asia-Pacific is facing the extinction of a vast amount of indigenous, traditional knowledge due to the loss of cultural and linguistic diversity. Inaction with regard to issues such as MTB-MLE will therefore lead to devastating cultural losses in the region.

Of particular concern in the Asia-Pacific is the loss of cultural and linguistic diversity, which will progress rapidly if adequate actions are not taken.

Inaction against the impacts of climate change

Another cost of inaction is the possible failure of the education system to prepare future generations for facing the impacts of climate change. Education for Sustainable Development is key in making sustainable development for the planet possible. This relates not only specifically to SDG 4.7 (education for sustainable development and lifestyles) but also to the SDGs as a whole.

Inclusive education and learning can enable all children, youth and adults to take actions that will prevent and mitigate the impact of climate change, as well as build their resilience to overcome the challenges the future will bring.³⁰ Current trends in the region also suggest the need for education systems that are better prepared to mitigate and adapt to climate change so that they can continue to deliver the crucial education services needed to achieve SDG 4.

Future generations need to be prepared for sustainable development actions. The neglect of ESD will impact society as a whole, and is particularly pressing in the Asia-Pacific region.



30 See, for example, UNESCO's report <u>Education sector responses to</u> <u>climate change</u>: <u>background paper with international examples</u>.

Current Challenges and Opportunities for SDG 4 in the Region

In order to examine progress towards SDG 4 since 2015, especially in relation to the promotion of more inclusive and equitable education systems, schools and opportunities, this section analyses trends with regard to the factors of exclusion discussed above, as well as existing policies, programmes and strategies that could be effective in addressing exclusion.

Target 4.5

Equity and Inclusion

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.

Out-of-school children, adolescents and youth

Before discussing individual factors of exclusion, it is important to consider the magnitude of the problem with regard to inequality and exclusion in education. Although the target analysis shows the total number of out-of-school youth in the region to have decreased by 9 million between 2015–2018, the rate of out-of-school children, adolescents, and youth of primary and secondary school age generally remained the same for all sub-regions of the Asia-Pacific from 2015 to 2018 (Table 6), with a slight increase in the out-of-school rate in Central Asia.³¹

Disabilities

The challenge of equitable and inclusive education for those with a disability is often considered the most challenging to analyse and overcome. This is due to the sheer variety of categories of disability, as well as the societal stigma attached to persons with disabilities, the lack of information available to parents and caretakers, the lack of skills and experience available to and needed by teachers and school leaders, and the inability (often due to lack of political will) of governments and schools.

In the Asia-Pacific region, persons with disabilities are among the largest minority groups, making up around 690 million people (UNESCAP, 2019b). A recent ESCA study shows the prevalence of disability ranging from 24 per cent in New Zealand to 1.1 per cent in Brunei Darussalam. Within these figures there is also a wide variation of disabilities that are considered severe or moderate.

Table 6. Rate of out-of-school children, adolescents and youth

Indicator	Rate of out-of-school children, adolescents and youth of primary and secondary school age, both sexes (%)			
Time	2015	2016	2017	2018
Country				
Central Asia	7.8	7.1	6.6	8.1
Southern Asia	23.1	22.4	22.0	21.5
Eastern Asia	8.3	7.4	7.7	7.2
South-eastern Asia	12.8	13.0	12.2	12.5
Oceania (excl. Australia/New Zealand)	26.0	19.3	20.2	20.2
Myanmar	38.1	n/a		

Source: UIS Database (Nd.)

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³¹ For a more detailed analysis of out-of-school children in the region, see UNICEF's report <u>Learning Against the Odds: Evidence and Policies to Sup-</u> port All Out-of-School Children and Adolescents in East Asia and Pacific.

Despite the World Health Organization's estimated prevalence rate for childhood disabilities of 5 per cent, most countries in the region report lower rates at usually 2 per cent or less. This could be an issue of definitions, assessment tools, and/or the breadth of coverage of the assessment. The low rates in some countries likely indicate a serious undercounting of the population of persons with disabilities. The invisibility of those affected by disabilities, who are often hidden by their families, further excludes them from education.

The situation in education³²

Regardless of the definition or severity, children with disabilities are seriously under-represented in education systems.

Youth with disabilities remain excluded from education and from learning, whereas children with disabilities, compared to those without, face the following challenges:

- They are more often refused entry into schools because of their disability
- They are less likely to complete primary, secondary and tertiary education
- They spend fewer years in school
- They have lower literacy rates

It is estimated that in developing countries of the Asia-Pacific region, 50 per cent of all children with disabilities do not go to school. In some rural areas the rate is as high as 90 per cent. In particular, children with moderate and severe disabilities find it difficult to access school and to participate in learning and other school activities. An additional challenge are gender disparities, since girls and women with disabilities tend to face double discrimination, which leads to the least amount of time in school – less than two years in Bangladesh, two in Cambodia, and about four years in Viet Nam (Shaeffer, 2020).

Barriers to the inclusion of learners with disabilities and delays in school and in learning are many, all of which hamper the achievement of SDG 4 targets dealing with attendance and achievement. **Enrolment** is limited by factors such as family shame, community stigma, poverty, unwillingness of schools, the lack of accessible facilities and adequate resources, teacher anxiety and negative attitudes of parents who have children without disabilities. Other barriers include the distance to school and the drain on family income for additional medical needs.

In addition, achievement is limited by the lack of appropriate support in schools, the lack of curricula, materials and assessment protocols adapted to special needs, and teachers' unwillingness or lack of capacity to understand and respond to the needs of learners with disabilities.

Policies and strategies

A number of policies and strategies have promoted the greater inclusion of children with disabilities in the region whether in the classroom or in learning. Overall, the understanding of the rationale for inclusive education has grown. In particular, SDG 4.5, with its focus on reducing disparities, has concentrated the work of ministries of education towards meeting the special challenges faced by persons with disabilities.

For example, in 2017 China introduced Regulations on the Education of Persons with Disabilities, followed by more specific policies for the Enrolment of all Children with Disabilities as part of Compulsory Education (2017), Accelerating the Development of Vocational Education for Persons with Disabilities (2018), and guidelines for promoting disability-inclusive education (2020).

Barriers to inclusion

³² For recent information, see the newly published report from UNICEF: <u>Education for Every Ability</u>.

Other useful policies and strategies to help remove barriers related to disabilities include:

- Parental education with regard to issues such as prenatal and antenatal health and nutrition.
- Early Childhood Intervention (ECI)
 policies and practices procedures to
 help identify and then either resolve or
 mitigate the severity of disabilities and
 delays in young children, and if possible,
 from birth.³³
- **Disability-inclusive ECD programmes**and schools³⁴ which promote a more
 inclusive ethos and mindset linked to issues
 such as student admission and teacher
 and staff recruitment. Such schools usually
 provide for: 1) the training of teachers in
 inclusive pedagogy; 2) the provision of
 accessible facilities, assistive devices, and
 classroom assistants; 3) revised curricula
 and materials; 4) examination protocols
 suitable for different kinds of disability,
 and 5) different kinds of certification for
 different levels of achievement.³⁵
- Disability-inclusive EMIS,³⁶ which are intended to seek out information on the numbers, categories, and locations of learners (and sometimes of teachers) with disabilities.
- Collaboration with Disabled People's
 Organizations which can bridge gaps in communication and actions between government, service providers and families to facilitate access and learning of children with disabilities (Samoa).

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• Establishment of inclusive education centers where students are provided with scholarships, learning materials and school meals (Lao PDR), and creation of a new division for Special Education within the Ministry of Education, catered solely to children with disabilities (Mongolia).

Gender

Gender is a long-standing factor of exclusion in the Asia-Pacific. With some exceptions, the region has made considerable progress in achieving gender parity in all levels of education. Not only has the Gender Parity Index (GPI) improved over time, even in more disadvantaged sub-regions, but the GPI is considerably better than in other world regions.

The situation in education

UIS Data show that the GER and NER for boys and girls at different levels of education for Southern Asia, Eastern Asia and Oceania in 2015 and 2018 have increased, except for a small decrease in GER for primary-female for East Asia and Oceania. This is likely due to more girls enrolled at the correct age. In East Asia and Oceania, there is a decrease in NER. The data show a general positive trend in the GPI in Southern Asia, Eastern Asia and Oceania for girls' enrolment at all levels. More specifically, in terms of gender parity related to gross **enrolment**, in Southern Asia the GPI for tertiary education is considerably lower than in primary education (to the disadvantage of girls) while the opposite is true for South-eastern Asia. Central Asia also shows a considerable decrease in GPI for enrolment from primary to tertiary education. However, sub-regional statistics do not capture the differences among countries and among levels of education within countries (Shaeffer, 2020).

In terms of **completion**, in South-eastern Asia more girls complete all three levels of education

³³ The Philippines has an established policy and a system for prevention, early identification, referral and intervention for 0–4 years old children.

³⁴ Terms such as 'disability-inclusive education' and 'gender-inclusive education' are useful to the extent that they help promote the broader definition of inclusion beyond disabilities.

³⁵ An example can be found in the case study on Vanuatu's disability-inclusive approach to TVET.

³⁶ Countries such as Fiji, Federated States of Micronesia, Mongolia, and Malaysia etc. are working to enhance EMIS with individual student data, including disability status, to provide tailored support to the most disadvantaged children. See UNICEF EAPRO's report Review of Education Management Information Systems (EMIS) that Track Individual Student Data.

– primary, lower secondary and upper secondary – than boys. In Southern Asia, fewer girls complete secondary education than boys. Central Asia has achieved parity in this area.

In terms of **enrolment in TVET**, boys are advantaged in all sub-regions of Asia-Pacific but greater equity has been achieved in girls' enrolment in South-eastern Asia and Eastern Asia (but not in Central Asia, Southern Asia, or Oceania).

With regard to **achievement**, as with enrolment, girls outperform boys. This tends to begin early on. As indicated in the target analysis, in countries where a lower proportion of children are developmentally on track, there is a large disparity in age-appropriate levels of development at expense of **boys**, children from rural areas and poor families.

Other important trends in the region with regard to gender and education include:

- An increase in School Life Expectancy
 (SLE) the number of years of school which a child can expect to complete.
- Girls outperform boys in most subjects, as shown by school-level data (UNESCO, 2019a) and results from PISA 2018.
- Low literacy rates among women are observed, with the adult female literacy rate in Southern Asia at just over 60 per cent in 2018.
- **Gender disparities in the educational workforce**, with women dominating in
 ECD programmes and primary schools,
 while being increasingly disadvantaged in
 higher education, both as teachers and as
 administrators (World Bank, Nd.).
- Percentage of women in school leadership positions, which is far lower than the percentage of women who are teachers, and increases the higher the level of education gets.

Barriers to inclusion

The barriers to gender parity for **girls** are many. **Sociocultural factors** as well as religious perspectives mean that girls are often forced to stay at home, assist in domestic chores, marry early, often without easy access to contraception. In sub-regions such as Southern Asia, girls may be less valued in the family and community. Whereas in some religions, especially in adolescence, girls are often expected to be less visible in public spaces, therefore limiting their experience to the household rather than the school.

Economically, families may feel less need for educating girls since they perceive them as bringing in less potential income than boys, or they might marry and join the husband's household altogether. Therefore, boys tend to be seen as more productive. Boys, on the other hand, face other barriers, such as a lack of male role models in education, pressure to leave home to find work, and added societal pressure on providing for their families.

In addition, gender disparities arise in **school** and education systems of the region, which often reflect patriarchal sociocultural attitudes as well as financial constraints. Affirmative actions are therefore not taken to get more girls into the system. If they are in school, teachers may otherwise expect and demand less from them. Women are also less often promoted within the education system to higher levels of teaching and administration.

It is difficult to predict the impact of COVID-19 on girls' return to school. The Malala Fund has estimated that 10 million more girls of secondary-school age in low and lower-middle income countries could be out of school as a result of COVID-19. The World Bank estimates that 7 million primary and secondary students are at risk of dropping out, with an increase in the out-of-school population of 2 per cent

(World Bank, 2020c). According to Save the Children, between 7 and 9.7 million children are at risk of dropping out of school due to rising levels of child poverty (Save the Children, 2020). UNESCO also estimates that globally, 23.8 million children, adolescents and youth (from pre-primary to tertiary level) are at risk of not returning to school in 2020, including 11.2 million girls and young women. While the numbers are not yet clear, we know that reductions in girls' return to school will have devastating impacts not only for girls, but also on early and forced marriage, child health and nutrition, economic growth and many other outcomes.

Policies and strategies

A range of policies and strategies have been adopted to promote girls' enrolment in and completion of school. A comprehensive example is the 2017 Gender-Responsive Basic Education Policy in the **Philippines** which seeks to integrate gender equity, gender sensitivity, non-discrimination, and human rights in the provision and governance of basic education. Another approach, as in Lao PDR, is to ensure that its national action plan for youth literacy places special emphasis on girls.

The following strategies have proven successful for advocacy and affirmative action regarding gender parity in enrolment, completion, and achievement:

- Conditional cash transfer programmes
 which link payments to families or their
 daughters for enrolment and attendance.
 In Bangladesh, a long-standing
 programme focused on the enrolment of
 girls in secondary education proved to be
 successful (Akhter, 2015);
- Scholarships targeted at girls, especially in higher education;
- Gender audits of textbooks, other materials, and even teaching practices to see how girls are treated as opposed to boys;

- The establishment of girls' schools, community-based education for girls in rural areas, and the targeted recruitment of female teachers in **Afghanistan**;
- Research and analysis of gender differences regarding education access and learning achievement (such as participating countries in SEA-PLM, Fiji, Niue);
- Gender-sensitive facilities (separate toilets for girls and boys) and, as in **Bhutan**, the provision of sanitary pads in schools;
- Affirmative action quotas for the admission of girls into TVET and higher levels of education, such as the mainstreaming of gender initiatives in the **Philippines**, where the Technical Education and Skills Development Agency (TESDA) has a Gender and Development Agenda prioritizing gender issues. In **Uzbekistan**, TVET in high schools were set-up to encourage participation especially for young women.
- Training of teachers, school leaders, and support staff to identify and report incidences of gender-based violence (GBV) and to provide appropriate referral mechanisms. Japan's Learning and Career Development Support Project to Promote Gender Equality creates a system to integrally support learning, reemployment and social participation in the community of women who left their jobs due to child-raising or other reasons in collaboration with the universities, local governments, and related organizations such as gender equality centers.

Advocacy and affirmative action with regard to general parity within the education profession

Advocacy and affirmative action programmes have also promoted women in the education profession. This has included quotas for women in teacher education programmes. In addition, there is a need for teachers to be trained in gender-responsive, disability- community- or ethnic group-sensitive curricula and pedagogies.

The aftermath of the COVID-19 pandemic is a moment to build resilient education systems that reimagine the future of education and ensure a 'new normal' for girls. This new normal requires a transformation in our approach to ensure education systems are genderresponsive by design. Building back better for girls means putting gender equality at the heart of education – from teaching and learning environments, teacher training and practice, education curricula and materials, to leadership and administration. It will also require ministries of education to collaborate with other ministries to bring a whole government approach to build more genderequal education systems.

Socio-economic status

Socio-economic status is another important determinate of educational access, quality, and achievement. There is an ongoing debate about whether education tends to break the intergenerational transmission of poverty, or simply reinforces patterns of wealth and poverty. In the Asia-Pacific, socio-economic status still tends to be indicative of a person's education.

Data show that family wealth, with the exception of Central Asia, is a major determinant of primary school enrolment (UNESCO, 2019a). There is a gap between the percentage of the poorest students (male and female) completing primary school compared to the richest students in most countries of

the region, and is larger in South-eastern Asia than in Southern Asia. Likewise, the Wealth Parity Index³⁷ is also lower in South-eastern Asia, perhaps reflecting what are often large income disparities, as described above, in countries such as Thailand and the Philippines.

The situation in education

Socio-economic status is also a strong predictor of **performance** as is found in SEA-PLM 2019 results (UNICEF EAPRO and SEAMEO, 2020), which clearly showed that across all six participating countries in Southeastern Asia, students from higher socioeconomic backgrounds tended to achieve significantly higher scores in reading, writing and mathematics. Similar findings were also observed in mathematics and science in all countries participating in PISA (OECD, 2019).38 A detailed study conducted in Indonesia showed that socio-economically advantaged students outperformed disadvantaged students in reading by 52 score points in PISA 2018 - higher than the 44 points found in 2009. This is due to low-performing students being clustered in schools of relatively low quality.

Country-level data from PISA reinforces the fact that there are **serious wealth disparities related to achievement**, particularly in Brunei and Thailand (reading); in the Philippines and Cambodia (mathematics); and Malaysia and Thailand (in both reading and mathematics). In the Philippines, for example, the percentage of disadvantaged students with minimum achievement in reading is 11 per cent of the proportion of advantaged students (OECD, 2019).

³⁷ The Wealth Parity Index (WPI) measures progress towards parity in education participation and/or learning opportunities available for children, adolescents or youth living in households in the poorest quintile in relation to those living in households in the richest quintile. To calculate it, divide the poorest quintile value of an indicator by the richest quintile value of the same indicator.

³⁸ See <u>PISA 2018 Results, Volume I. PISA covers only some, usually better developed countries in the region, and focus mainly on adolescents (aged 15) remaining in school.</u>

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Youth-led action research (YAR): A community-centered approach for mainstreaming marginalized youth voices in education

The YAR project forms part of ASPBAE's commitment to empower marginalized young people and strengthen their voices in global policy fora on education and lifelong learning across the Asia-Pacific region. In 2016, ASPBAE and the UNESCO Institute for Lifelong Learning (UIL) launched a 2-year action research project in three countries of the region: India, Indonesia and the Philippines. With the help of local partners, community youth were trained for conducting action research studies that carried out a systematic inquiry focused on critical aspects of the education and learning needs of marginalized youth groups. Adolescent Tribal and Dalit girls, single mothers, and urban poor youth were chosen to be part of the project. Nearly 100 young community members were involved in the entire research and action-advocacy process from the three respective countries. More than 5,000 youth actively participated and shared their stories -and perspectives through household surveys, interviews, focus group discussions, theatre workshops and youth camps.

Intense trainings related to participatory research, advocacy, leadership, gender, education, and other issues around equity and inclusion took place periodically. The respective country partners and youth mentors guided the group's fieldwork and dissemination work, which made the research journey more robust and effective. At the end of the research, youth groups prepared a demands charter that was presented at the local panchayat (India), district education offices, local governments, and even to national level authorities, holding their representatives accountable for equal, accessible, safe and quality education for all.

This advocacy work helped translate research into community actions and feeding it back to action-reflection learning cycles. Most importantly, at the centre of the local actions are the marginalized youth who initiated community learning spaces, youth activities, community awareness-raising and advocacy, therefore contributing to the implementation of SDG 4.

PISA data not only show a gap between country scores and the OECD average, but also large differences between learners in the top and bottom quarter of the international Economic, Social, and Cultural Status (ESCS) index. It also shows differences in reading scores among the bottom 10 per cent and top 10 per cent – above 130 points in Brunei Darussalam, Malaysia, the Philippines and Singapore.

Barriers to inclusion

Socio-economic status creates several barriers to inclusion in education. One of these barriers is the **cost of schooling**. Since many Asia-

Pacific countries allow schools to charge fees, especially at higher levels of education, the costs can make it impossible for children of poor families to attend and remain in school. This is particularly true for private schools and higher levels of education.

Family poverty is another important barrier to inclusion in the region. Both the increase in poverty and the decrease in remittances from overseas labour due to the impact of COVID-19, leads to less financial resources available for education. In addition, poorer family environments tend to be less supportive of education and do not offer supportive materials at home.

Lastly, **private tuition** plays an increasingly important role for the success of education in the region, and in particular before high-stakes examinations. Those who cannot afford private lessons lose the academic advantage that wealthier students have (Bray, 2012).

Policies and strategies

Many policies and strategies have been put in place to combat poverty as a major factor of exclusion from education. At the highest level, **Thailand** established an Equitable Education Fund in 2018 as a government-supported (but autonomous body) with a mandate to provide financial support to underprivileged children and youth (Shaeffer, 2020). The fund aims to help such children acquire vocational skills for life and work, and to conduct research for teacher and learner development as well as support human-resource development.

In addition to such institutional support focusing on disadvantage, there is a wide range of strategies and actions to mitigate the impact of the cost of education as a detriment to the enrolment of children from poor families. Some are direct transfers (conditional or otherwise) to target poor families or students, whereas others work through grants to ECD programmes and schools. These include:

- The abolition of school fees: In Viet Nam, plans are being made to provide free tuition for all pre-school children aged five and for all junior secondary school students. Where there are not enough public primary schools, the government assists pupils in private primary schools to pay their fees.
- **Financial assistance**: Programmes for financial assistance in various forms, such as tuition exemptions, loans, or scholarships, have been provided in some countries. These have become especially important in higher education, which is

often prohibitively expensive. Examples include free materials in Bhutan, the Bidik Misi Scholarship scheme in Indonesia, the conditional cash transfer programme Waseela-e-Taleem (WeT) in Pakistan and the Philippines, China's Action Plan for Poverty Alleviation by 2020, Japan's High School Tuition Support Fund and reduction or waivers of tuition and enrolment fees by universities and Thailand's scholarship for university students in financial need.

- Reducing the influence of private tuition: 'Shadow education' has been regulated in some countries in order to stop the favouring of those who can pay over those who cannot (Bray, 2012).
- Different kinds of **enrolment schemes**have been established to ensure that
 elite, 'favourite' public schools are not
 only attended by the rich. In Indonesia,
 for example, a new policy introduced in
 2019 requires good quality schools to
 accept 50 per cent of new enrollees both
 from rich and poor families from their
 immediate catchment area to provide
 equal access to quality education.³⁹
- A final strategy is high-level and local advocacy concerning the importance of education to members of all levels of society. Disadvantaged parents who are already struggling to earn an adequate income, are not likely to be attracted to schools which cost money and take their children away from income-generating work.
- Flexible learning options and alternative learning systems in the Philippines consist of various learning interventions, which allow children and youth from poor families to access education that is responsive to their needs, contexts and circumstances.

³⁹ The original percentage mandated by the Ministry of Education was 80 per cent. Public pressure from elite families forced the reduction to 50 per cent.

Location (urban-rural-remote)

Rural-urban migration has increased over the last decades, resulting in attempts to 'ruralize' the curriculum in hope of dissuading rural populations from migrating. These attempts generally failed as the promise of better opportunities and greater wealth in cities attracted an ever-larger number of migrants. As a result, this led to a reduction in population, skilled workforce, and of resources in rural areas, with those remaining tending to be less educated than their urban peers.

The situation in education

The adjusted parity index for location (Table 7) demonstrates how location can be a barrier to education. With the exception of Central Asia, children in rural areas in other sub-regions are disadvantaged in terms of school completion both at primary level (presumably in schools closer to their homes) and even more disadvantaged at lower secondary level where they likely need to travel longer distances (OECD, 2019).

In terms of **achievement**, students from rural areas and poor families are less likely to meet minimum proficiency standards in both reading and mathematics compared to peers from urban areas and rich families, as reported in the target analysis in Chapter Three.

In many cases, the **quality of facilities and resources** – teachers, infrastructure, materials
– are of lower quantity and quality in rural and remote schools.⁴⁰ This is due to small schools disadvantaged by standardized per capita grants, a limited quantity and quality of teachers, and a lacking interest in Multi-Grade Teaching (MGT).⁴¹

Barriers to inclusion

The barriers to education for learners living in rural and remote areas are many. For example, physical **distance** to schools complicates access for the most remote communities, especially for younger children and those with disabilities.

In many countries, **policies to merge schools** are popular. They may be economically efficient and even pedagogically useful, collecting scarce

Tab	e 7.	Estimated	d adjuste	ed parity	y ind	lex (location)
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Disparity						
	Primary Completion	Lower Secondary Completion				
Reference year:	2017					
Region	Median					
Central Asia	1.00	1.00				
Southern Asia	0.90	0.84				
South-eastern Asia	0.93	0.74				

Source: UIS Database (Nd.)

⁴⁰ Many of these disadvantages of rural and remote schools – teacher quality, lack of community support (financial and otherwise), poorer infrastructure, etc. are also relevant for urban, poor, informal settlements.

⁴¹ The argument for multi-grade teaching is not always easy to make. In some countries it is considered 'second class education' – a deviation from the ideal model of one teacher/one class and despite the evidence to the contrary (see Angela Little, ed., <u>Education for All and Multigrade Teaching: Challenges and Opportunities.</u>)

resources and teachers from small schools into a larger school. However, such merged schools may result in greater distances from remote villages and are therefore even more difficult to reach.⁴²

Rural and remote schools also tend to **provide** a **poorer quality of education**. The relative disadvantages of these schools, such as financial resources from the government or community, lack of textbooks and other learning materials, poorer infrastructure, and a teaching workforce often less qualified and with a high turnover, only lead to greater inequity.

Lastly, the **irrelevance of the curriculum**, **language of instruction and school calendar** is an important barrier. The national curriculum content and standardized materials may not be relevant to the lives and learning needs of children living in remote areas. The material may not be delivered in their mother tongue, and the school calendar and timetable, imposed by an urban-based ministry, may not fit with the local, daily or annual economic cycles – the latter of which might require children to be out of school during particular seasons of the year.

Policies and strategies

A range of policies and strategies have been implemented in the region in the aim of tackling these barriers:

- The provision of early childhood development programmes, often homebased rather than centre-based. This includes the 'Home Study Programme' for children aged 0–4 in remote areas of the Philippines and similar home-based care programmes in Cambodia and Viet Nam.
- The retaining of small schools wherever possible by providing them with the additional resources needed for their

42 Such merging may also remove an important social and cultural centre (the school) and the most educated people (the teachers) from small villages.

students' well-being. This includes a school feeding programme for rural schools in **Bhutan** and **Thailand**'s small school strategic development plan with a focus on so-called 'Border Schools' in impoverished and remote areas of the country. The **Philippines** has created a programme for 'Prioritizing the Development of the Last Mile Schools (2020–2021): Reaching Out and Closing the Gap' which aims to address the gaps in education resources and outcomes remaining in remote schools.

- Alternatives to very small schools in cases where small schools must be merged to ensure that children are not pushed out of education as a result. These include satellite schools for the early grades, the provision of transportation to distant schools, the provision of boarding schools as found in **Bhutan**, **Indonesia** and China, and 'one-roof' schools in **Indonesia**, which combine small primary schools and lower secondary schools.
- More effective mechanisms of allocating and retaining qualified teachers in remote and rural schools. China has a comprehensive approach to this challenge through offering more training and better treatment for teachers in remote areas, including special post incentives and other subsidies, as well as a special plan for pipeline teachers to work in impoverished and border areas.
- The adaptation of the curriculum to make it more relevant to the socio-economic and cultural context of the community, without making it impossible for more rural students to succeed with the mainstream national curriculum. Many countries in the region have developed a 'local content curriculum' meant to be filled with locally relevant content.

- The use of multi-grade teaching now being promoted, for example, in the Philippines through the 1997 and 2010 Policies and Guidelines in the Organization and Operation of Multigrade (MG) Classes.
- Nepal has almost completed the establishment of TVET schools in every local government unit, to improve and ensure access in education.

Language, ethnicity and culture

One important trend over the last years has been the growing interest in the use of mother tongue, home or first language in the education system either as the actual language of instruction and initial literacy in the early grades, or as a subject in the school curriculum. SDG indicator 4.5.3 in particular has helped to raise the visibility of the importance of language policies in education.

One important result of this growing interest was the 2019 High-Level Policy Forum on Multilingual Education, which was convened in parallel to the Inclusion, Mobility and Multilingual Education Conference held in Bangkok, Thailand. This Forum issued the Bangkok Statement on Language and Inclusion, the first ever policy statement in the region on multilingual education, which concludes the following:

'The main language of pre-primary and primary classrooms should be the one that children understand best.' (UNESCO, 2019b)

The situation in education

The Asia-Pacific has seen slow but steady progress towards the **adoption of national policies which promote the use of mother tongue in education**. However this varies in terms of the extent to which the mother tongue becomes the language of instruction

and initial literacy (meaning from pre-primary through the early grades of primary schools), or that it remains a subject in the curriculum to be taught (sometimes as an elective or as a second language) for a few hours per week.

The role of international languages in education must also be taken into account. In most cases this is English, with Russian and Mandarin also being popular options in Central Asia. Mastery of English, a goal held by most education systems in the region, is approached in different ways. A significant divide can be observed throughout the region between private or elite schools which may use English as the medium of instruction, and government schools where English consists of a subject, which is often inadequately taught.

Barriers to inclusion

A range of barriers prevent the further inclusion of children from linguistic and ethnic minorities in the education system. Official policies may not encourage the use of mother tongue or even actively discourage their use, whereby all written materials and classroom teaching may be in a national language, with school completion and promotion depending upon mastery of this language.

But even if systems are more welcoming of diversity, many practical barriers are in place which complicate the implementation of mother tongue-based multilingual education. These include **disagreements about how to structure the curriculum**, which should be designed to begin with mastery in mother tongue and end with mastery of the national language.

Another barrier is often the **lack of an agreed-upon orthography** for the language, either because it may not exist and therefore needs to be created, or because of disagreements among several closely related languages as to which orthography should be chosen for use

in education. An unsystematized grammar and under-developed vocabulary may also hinder MTB-MLF efforts.

A lack of available written material or, even if material exists, an inadequate supply of mother tongue teachers who know how to teach in the mother tongue, also pose a barrier to inclusive and equal education in the mother tongue. Thus, it often becomes much harder to help students make a successful transition to the national language(s).

Policies and strategies

Despite these political, social, and pedagogical challenges with regard to mother tongue-based multilingual education, as well as the maintenance and reinforcement of the cultures that they represent, a range of **policies and strategies to promote MTB-MLE** have been introduced in the region:

- Cambodia supports instruction in five languages based on a language policy developed between 2014–2015. This Multilingual Education National Action Plan (MENAP) is a five-year action plan on implementing multilingual education and strengthening the MLE model in the country, with the aim of expanding into new languages.
- The Philippines MTB-MLE policy involves implementation of local mother tongues as the language of instruction from Kindergarten to Grade 3.
- India, for many years, has supported a range of languages in its various states leading to instruction in Hindi, English, the official state language, as well as minority languages. In some cases, there are indications that MTB-MLE be used until Grade 5.
- Several states in Myanmar, whether supported by the central government or not, use local languages in education as well as in other development sectors.

- Central Asian and Pacific countries are slowly moving away from exclusive dependence on a dominant (usually colonial) language such as Russian, English or French, towards national languages and even mother tongue language (such as the Cook Islands, Palau, Tokelau, Tonga and Samoa). In some cases, however, the former colonial or dominant language may remain an 'official' language alongside the national language.
- For decades, New Zealand has promoted Maori as a second national language, which has even been made available through higher education, with an important role to play in both education and government.
- Thailand and Bangladesh have permitted local education authorities to select the language(s) to be used in schools and prepare the necessary materials for teaching them.

Another important policy is the **development** of curricula and materials in mother tongue languages. This requires the willingness and ability of governments or other agencies to cooperate, and has played a major role in the introduction of MTB-MLE in Cambodia and the Philippines. In the process of developing orthographies, an expanded vocabulary, grammar and curricular materials, it is important to ensure that the local language community is always heavily involved.

In addition, it is important to identify and train teachers able to teach in mother tongue languages and assist children in making the transition to the national language(s).

Intensive, long-term efforts in this regard have been undertaken among minority groups in countries such as Cambodia where the government has worked with the support of Care Cambodia for over a decade to train teachers to work in multilingual contexts.

Other strategies to support the inclusion of learners from ethnic and linguistic

minorities also exist. Besides the use of mother tongue language in ECD programmes and the early grades of primary school to promote initial literacy and mastery of other curricular subjects, there are also other strategies linked to ethnicity and language that have supported inclusion. Examples include:

- Viet Nam: Support for school expenses for ethnic minorities in pre-primary and primary education.
- Lao PDR: established boarding schools for ethnic minorities so they can attend; university efforts aligned with national strategies to cultivate the talents of ethnic minority learners through multiple approaches and channels.
- The Philippines: the Madrasah Education
 Programme for Muslim learners promotes
 appropriate and relevant educational
 opportunities and content while
 recognizing the cultural context.

Refugee, migrant or emergency status

In the last five years, the number of **refugees** and internally displaced persons (IDPs) in Asia has increased, while their status has often deteriorated (Shaeffer, 2020). The number of persons displaced by civil conflict in the Asia-Pacific region totalled 7.7 million in 2018, including 3.5 million refugees, 1.9 million IDPs and 1.4 million stateless persons (IOM, 2019).

This number of refugees, who are fleeing economic hardship, conflict, natural disasters, or political pressure, is presumably increasing due to the impact of COVID-19 and climate change. However, governments across the region appear less and less willing to receive them, let alone provide them quality education, thus leaving the challenge largely to development agencies and Non-Governmental Organizations (NGOs).

The number of **migrants** inspired by climate change is also increasing, and these numbers will likely only increase as more frequent droughts, tropical storms, floods, rising temperatures and sea levels drive people from their traditional homes (UNICEF EAPRO, 2019b). Migrant populations also fluctuate, in numbers and destinations, but it is likely that up until the COVID-19 pandemic began, the numbers increased due to the impact of greater economic disparities, the lack of employment opportunities in rural areas and climate change.

The situation in education

Children of refugees, migrants, and people internally displaced face a complicated situation when it comes to their education. For children of illegal migrants, who are 'undocumented' or 'stateless' without proper papers or legal status, the challenge is even greater. Along the Myanmar border in Tak province, Thailand, there are more than 13,000 non-Thai students enrolled in public schools, and another 12,000 migrant children attending migrant learning centres sponsored by NGOs (Aoyagi, 2018).

Some refugees are being taught in ways meant to integrate them into the host country, others to prepare them for a return to their country of origin, or to make what they hope will be a smooth transition to a third country.

Across different countries and contexts, it is unlikely that countries are able to provide an optimal education for these children – either because schools for urban migrant children are usually underfunded, or because children left behind often do not benefit from the support and motivation that their parents might otherwise provide. Children who follow their parents for seasonal migration have the added burden of an interrupted education as they move between their urban schools (if any) and their local community schools.

Barriers to inclusion

There are several barriers to the inclusion of refugees and migrants in education systems and schools. For **refugees**, these include a stigmatization of the refugee population of certain countries, which will likely only increase as COVID-19 infection rates soar. Barriers after arrival lead to minimal attention being paid to education, which is further exacerbated by serious underfunding in refugee camps and detention centres. Refugees also face a lack of adequate accreditation and certification systems, meaning they might lose their education status.

For **cross-border migrants**, stigmatization is often a challenge. They do not usually migrate with their children, meaning that they might be left behind and face barriers such as unsupportive home environments, the psychosocial stress of separation, and uncertainty (even more so after COVID-19) with regard to the availability and amount of parental remittances upon which so many households depend.

For **internal migrants**, as with international ones, children left-behind are also a challenge. But in some cases, children move with their families, seasonally or over the longer-term. The barrier to their education is that available ECD centres and schools (for instance those at construction sites) are of minimal quality. If their migration is seasonal, these children return to their village schools at any time of year. Interrupted education may therefore end up in children having to repeat grades and, ultimately, dropping out of school.

Policies and strategies

Policies and strategies aimed at improving the status of refugees, migrants and IDPs with regard to education are present in the Asia-Pacific region. However, there are still far too few policies and strategies, and the allocation of funding leaves much to be desired. The following policies and strategies are examples for potential solutions to the challenge:

- Development of curriculum content suitable for the likely futures of children of refugees and migrants: For children from refugee families, schools of adequate quality are important so that they can follow the teaching content. If they are likely to remain in the host country, a proper balance between an education that retains their cultural identity and one that prepares them for life in a new context is important. And if they consider their current host country as their country of first asylum in transit to a third country, other appropriate options (such as instruction in English) need to be available.
 - Attempts have been made in this direction in border settlements and camps in **Thailand**, which is home to over 90,000 refugees mainly from Myanmar. Education options, supported by the Thai government as well as UNHCR and local and international NGOs, vary among Karen refugee camps, Migrant Learning Centres, and even Thai state schools (Shiohata, 2018).
- Remedial and psycho-social support to children of migrant parents: Where children of seasonally migrant parents return to their home communities, strategies have been put in place to ensure that they remain with their original cohort of peers and do not repeat grades.
 - In Cambodia, this has been provided through extra-curricular support as well as special classes during school holidays. Secondary schools also provide counselling services for such children.

- Recognition of educational certifications between institutions and between receiving and sending countries: Refugees also need some guarantee that academic certifications achieved in the receiving country are ultimately recognized in the sending country to facilitate the student's return to the original education system. Similarly, if children opt to stay in the host country, they need to be assured that their certification, often gained in nongovernment or non-formal schools, will be recognized at higher levels of education and in the labour market.
 - In **Indonesia**, for example, a 'justification letter' is provided to a refugee child who has completed a level of education in one location to be used as a reference when continuing to higher education in another location.
 - In **Thailand**, where previously it was difficult for refugee children educated in camps to continue their education to higher levels in state schools, recent regulations now make this possible.



Cross-cutting Issues

In addition to the issues directly linked to inequity and exclusion analysed above, there are several issues that cut across these categories. These must also be considered when evaluating progress towards SDG 4 in the Asia-Pacific region, since they are important in developing more inclusive education systems and achieving the targets of SDG 4.

Issues such as other education providers, the dilemma of quantity vs. quality, the combination of exclusionary challenges, financing, governance and accountability, and monitoring, as well as the lack of data, will be discussed here. These issues only reaffirm that SDG 4 is inextricably linked to other sectors and the SDGs.

Challenges to equity and inclusion in education beyond the education sector

The education sector is not entirely responsible for inequity and exclusion in schooling and in learning. Extreme poverty denies millions of children the opportunity for a good education (SDG 1), poor maternal health and nutrition lead to poor child health and nutrition (SDG 3), food insecurity further interrupts and even harms their development and learning (SDG 2), and unresponsive labour markets provide few opportunities for their caregivers to earn the income required for further development and education (SDG 8).

Access vs. learning, quantity vs. quality

A constant dilemma facing governments around the world is whether to prioritize access to education (schooling for all) or the quality of education provided (better education for already included populations). SDG 4 expects both goals to be met, but the problem for many ministries of education will continue to be striking a balance in terms of investment and prioritization.

Multiple exclusionary factors

Many learners face more than one factor of exclusion or barrier to inclusion. A girl with a disability, living in a poor and remote village and not speaking the national language at home, will face many more challenges to obtaining an education than a boy living in an elite, urban context, without a disability and having the national language as his mother tongue. Most ministries only deal with one factor at a time. But if even one of these barriers is not mitigated, this girl will likely remain out of school.

Financing to reach the unreached

Funding education initiatives that reach those struggling with multiple exclusionary factors is a particular challenge. It is difficult enough, both programmatically and financially, to support children challenged by one excluded factor to attend school. This is almost impossible for those facing multiple factors. The belief held by many ministries of education reaching the last few per cent is not financially feasible, which means that many children will still be excluded even if they are.

Financing adult/lifelong learning and education

One area particularly neglected in terms of financing is that of adult education and lifelong learning, which usually represents under 1 per cent of the education budget. Youth and adult literacy programmes with priority given to women and other excluded groups are crucial to achieving SDG 4 in the region. Funding national surveys on literacy is also important, especially among the poorest and most excluded groups who are left behind in adult learning and education.

Governance and accountability toward inclusion

In countries with a highly decentralized administrative system, responsibilities in education may not always be clear. Different

levels of government may face disagreements, and exclusion and inequality tend to grow. One important aspect with regard to this lack of accountability is the absence of transparency and participation, combined with bureaucratic processes that restrict public scrutiny of education policies, financing and budgeting.

Data and monitoring: lack of data and analysis with regard to equity and inclusion

Lack of awareness with regard to the extent of exclusion and inequity in education can be a result of lack of interest or capacity⁴³ by educational management information systems in identifying and analysing disadvantaged and excluded population groups and regions. Often the information needed for such analyses is not collected or may not be considered important. Data related to participation and achievement of usually excluded groups are therefore often not collected, analysed or used.

Chapter Summary

Building upon the achievements of the earlier EFA movement and the MDGs, the SDGs have placed an even greater focus on the importance of ensuring greater equity in opportunities, through an inclusive education system, to achieve greater equality in both academic and life outcomes. Many of the gains in enrolment and completion in the last five years derived from greater success in moving families out of poverty, coupled with more aggressive policies to subsidize at least a basic level of education through direct transfers to schools or to families. For some excluded groups, progress has been made in the past and continues to be (or has even accelerated) under the SDGs.

⁴³ One of the key challenges faced by many, if not all, countries in the region is insufficient capacity and tools for collecting, analysing and utilizing data and information for equity and inclusion in the education sector. However, there are useful resources to help education administrators, technical staff and policy makers, such as the Regional Capacity Development Resource Book on Monitoring SDG4-Education 2030 in Asia-Pacific (UNESCO and UNICEF, 2019).

Despite this considerable progress, however, the region is not on track to achieve SDG 4 by 2030. Moreover, the various challenges discussed in this chapter are likely to be exacerbated by the effects of the COVID-19

pandemic. In order to meet the SDG 4 targets, decisive, sustainable and well-funded action must be taken. Only then can the region achieve equal and inclusive access to lifelong learning for all.

Excluded Groups	Barriers	Policies and Strategies		
Disabilities	 lack of data and information difficulties in identification and diagnosis stigmatization and negative attitudes inadequate barrier-free education 	 dedicated policies and regulations parental education and support disability-inclusive ECD disability-inclusive EMIS and data systems collaboration with Disabled People's Organizations inclusive education centres 		
Gender	 sociocultural factors religious beliefs gender stereotypes, norms and expectations in families, societies, schools and education systems 	 gender-responsive policies and action plans advocacy and affirmative action scholarships and cash transfers gender audits of textbooks and materials girls' school, female teachers, facilities quota and career development support address gender-based violence 		
Socio-economic status	 cost of schooling (and private tuition) family poverty (exacerbated by economic crises) less supportive family environments for learning 	 school fee abolition cash transfers and financial assistance regulation for private tuitions enrolment quota for poor families advocacy at multiple levels flexible and alternative learning systems 		
Location	 distance to schools merger of schools leading to reduction of small schools poorer quality of education irrelevance of curriculum and school calendar 	 home- or community-based ECD retaining of small schools satellite schools for early grades boarding schools equitable teacher allocation and support adaptation of curriculum multi-grade teaching increased provision of TVET in each locality 		
Language and Culture	 policies not recognizing or encouraging diversity disagreements about curriculum and language(s) lack of agreed-upon orthography lack of written materials inadequate supply of mother tongue language teachers 	 language policies to promote the use of mother tongue-based multilingual education, particularly at early grades sub-national or local adaptation of curricula and materials training of teachers to teach in mother tongue languages and support children in transition to national language(s) inclusion of learners from ethnic and linguistic minorities through quotas, scholarships, boarding schools and alternative learning 		
Refugee, Migrant or Emergency Status	 stigmatization lack of accreditation and certification system to recognize education status psychosocial stress low quality of education services available 	 suitable curriculum for various future options (stay in host country, return to home country, or transit to third country) remedial and psychosocial support recognition of educational certifications 		

CASE STUDIES OF INNOVATIVE PRACTICES AND SOLUTIONS

THE BARRIERS TO INCLUSION and the achievement of SDG 4 are often highly contextualized. It is therefore necessary to go more in-depth to examine how countries are implementing education goals in policy and practice. In this chapter, eleven different case studies that all share the lens of equity and inclusion showcase a number of advances and opportunities.

The case studies have been chosen to represent a wide variety of contexts in the region. This ranges from the richest countries such as Japan and Australia, to some of the poorest such as Kyrgyzstan and Tajikistan. It also reflects the most densely populated such as Hong Kong, and some of the least populated such as Vanuatu. The case studies also represent a wide range of barriers and responses from technology-led solutions to curriculum reform. They cover topics from improved teacher quality and safe, gender-sensitive schools, to non-formal education and inclusive teaching methodologies. All case studies follow the same structure in order to consider the context, success factors, sustainability of the initiative and applicability to other countries and contexts. The individual case studies provide useful insights to those facing similar challenges in other countries, while also identifying overall common best practices for addressing equity and inclusion in SDG 4 across the region. Before examining the individual case studies, however, these common best practices are first presented as follows:

It is vital to **clearly identify excluded groups and the barriers they face** in order to adequately address them. All case studies demonstrate well-defined marginalized groups, with a detailed understanding of the necessary solutions to the underlying barriers causing their exclusion. Case study eleven 'Inclusive TVET for People with Disabilities: the Vanuatu Skills Partnership' is one such example. If the barrier to accessing school is a lack of suitable physical infrastructure for instance, the revision of an education policy or legal act emphasizing the right of children with disabilities to education is unlikely to have a significant impact.

Adequately identifying excluded groups and the reasons behind their exclusion through **data and information** are crucially important. Monitoring and the use of data are key success factors identified throughout the case studies. This allowed successful interventions to be adjusted, and to ensure that they were improving access to education and learning outcomes. Even in data poor contexts, data and information are important components, as successful interventions focused on addressing these data gaps as their principal activity. This is particularly visible in case study three 'Monitoring the Right to Education in Pakistan' and in case study four 'SDG 4 Monitoring in Indonesia'.

Effective partnerships are another common feature of successful solutions, although the nature and membership of such partnerships varies dramatically across the case studies. They often include governments, the private sector, research institutions, the media, civil society and international organizations. One such example of this is found in case study one 'Connected Country: Learning in Rural and Remote Areas – in six countries'. In many of the case studies, one of the most important partners engaged were the marginalized communities themselves, who played a vital role in identifying the problem, developing solutions and their implementation. Examples are found in case study six 'Non-Formal Education for Rural Women in India – MPowered Application' and in case study seven 'Mother Tongue-Based Multilingual Education in Thailand'. Another crucial partner identified among the case studies were teachers and facilitators, who were also engaged in successful solutions.

Teachers and facilitators play key roles in identifying the problem and developing solutions, however they tend to carry the greatest burden in the implementation of those solutions. Teachers and facilitators often end up being held accountable for education reforms and innovations, as they represent the final interaction with students. Their initial contribution, as well as their later capacity development, are therefore crucial for success as demonstrated in case study two 'Enhancing Kindergarten Teacher Quality in Hong Kong (SAR of China)'.

Although equity gaps in SDG 4 are often the result of long-term historical factors, the case studies demonstrate the importance of **developing future facing solutions**. This is achieved through the use of new technologies and awareness of the need to shape the education system for the contexts of the future. This is visible in case study five 'Building Leadership for Sustainable Development in Central Asia and Afghanistan', and in case study ten 'Enabling lifelong technical and vocational education and training: the Republic of Korea's Innovation Plan'.



1 Connected Country

Learning in Rural and Remote Areas in six countries

Technology and Inclusion

- Industry partnership between Curtin University and Cisco to improve rural education
- Technology-driven strategy for enhancing education in six Asia-Pacific countries (Australia, Indonesia, Japan, Malaysia, New Zealand and Singapore)
- New ways of using telecommunications and digital learning
- Blending offline and online resources for learning methodologies
- Team-based and peer-to-peer learning
- Enabling rural students to access higher education

Summary

Connected Country is a project based on an industry partnership between Curtin University and Cisco aimed at creating a strategy for learning in regional, rural and remote (RRR) areas. This strategy is technology-driven in order to enhance engagement with post-secondary education and career development advice for school students. A blend of online and offline learning methodologies provided by instructors, teachers and parents is hoped to support students living in RRR areas in the six participating countries in Asia-Pacific to engage in team-based learning with online learning resources. Ultimately, improved secondary education will then enable participating students to advance to post-secondary and higher education.

Implementing SDG 4

- Target 4.1: Free and quality learning for all
- Target 4.3: Higher education opportunities via the Connected Country network
- Target 4.4: Improved skills through peer-to-peer learning and use of digital platforms
- Target 4.5: Accessibility and equity in access to remote learning

Context

Countries participating in the Connected Country initiative are all home to isolated communities living in RRR areas that struggle with access to education. Not only is there a lack of local expertise with regard to high quality education in RRR areas, but access to higher education is often not

Networks of indigenous schools in rural communities can help to introduce outside expertise and provide higher education opportunities for community members.

available. According to the Commonwealth of Australia (2007), one of the most persistent challenges in this context is the attraction and retention of high quality teachers in RRR schools, which can lead to a lower quality of education and in turn lower chances of accessing higher education.

By building and connecting a network of indigenous schools in RRR communities, Connected Country intends to introduce outside expertise to these areas. The project's strategy is intended to address local education issues, eventually providing higher education opportunities directly to members of RRR communities. In addition, recent experiences during the COVID-19 pandemic have shown that online learning can be crucial for continuity in education during isolation (World Bank, 2020b).

Connected Country: Supporting learning in regional, rural and remote areas

Initiated in 2020, the project is led and funded by Perth's Curtin University and networking hardware company Cisco Systems, Inc. Before its application in the Asia-Pacific region, Connected Country was successfully implemented in Canada for the last five years, where it expanded to a network of 200 schools.

Connected Country has the core objective of bringing the outside world into these remote communities by using advanced communication technologies in education. The initiative hopes to utilize these technologies to improve access to higher education and overall quality of education in RRR areas.

The following **activities** are being conducted as part of Connected Country's strategy in participating Asia-Pacific countries:

- Creation of an advisory board
- Development of a research laboratory as a hub for distributed learning
- Provision of the needed technologies and expertise
- Coordination and support of the network

Success factors

While results from Connected Country in Asia Pacific have not yet been documented, its success in Canada gives reason to believe that the project will have a successful impact. Canada's network of Connected Country schools has increased from a handful of schools to over 200 schools in only four years. Participating schools in indigenous communities also mentor each other and share online resources such as methodologies and technologies for remote learning (Curtin University, 2020).

The effectiveness of the Connected Country initiative is ensured by focusing on local capacity building. This allows participants to shape the school projects according to the needs of each individual RRR community. By utilizing the benefits of technology, efficiency is also addressed.

Key factors for success

- Addresses barriers such as distance to access education through digital technologies (Target 4.1).
- **Improves access** to knowledge, skills and teachers for rural communities, thus improving educational opportunities such as access to higher education (Target 4.3).
- Supports the **creation of a learning network** between RRR schools and improved accessibility to learning opportunities (Target 4.5).
- Creation of a vibrant community with peer-to-peer learning (Target 4.4).

Applicability

Connected Country's strategy focuses on understanding and building upon indigenous knowledge and traditions. This includes taking into account the local community's relationship with their land and their indigenous traditions. A similar approach can be applied in other regions, provided that mutual learning and respect are at the core of the project.

Sustainability

The sustainability of the Connected Country initiative rests primarily through partnerships between the government, the private sector and educational institutions. In addition, the use of technology to provide distance education ensures a focus on lower costs and reduced travel time, while also granting access to quality education and higher education – therefore contributing to achieving SDG 4 Targets 4.1, 4.3 and 4.4.

Finally, the learning content provided to students is itself focused on sustainability principles. In particular, Connected Country aims to balance the social, economic and environmental impacts of learning, harnessing digital tools to address the realities of everyday life in RRR communities. This culturally sensitive approach contributes directly to Target 4.4 by equipping rural learners with skills for entrepreneurship and to obtain decent work.

Conclusion

Connected Country has seen considerable success in Canada, with its implementation in the Asia-Pacific region met with hope for similar results. By combining technological solutions with cultural sensitivity, it aims to provide rural communities with increased access to quality education, higher education as well as the opportunity to learn relevant skills. Peer-to-peer learning also contributes to making the project sustainable by leading to relevant and effective learning outcomes. Furthermore, this project is highly adaptable, since it is possible to tailor its activities and content to local needs. This leads to the hope that it will continue to be effective in contributing towards achieving SDG 4 in the long term.

2 Enhancing Kindergarten Teacher Quality

in Hong Kong (SAR of China)

Teacher Quality and Equity

- Free Quality Kindergarten Education Policy
- Aimed at increasing kindergarten programme and teacher quality
- Conditional funding based on kindergarten performance measures
- Teachers trained and supported to make education more accessible and equitable

Summary

Hong Kong (SAR of China) has focused on enhancing the quality of Early Childhood Care and Education (ECCE) since the 1980s. As a result of these efforts, the government has effectively enabled access to quality education and enhanced teacher quality at pre-primary level – priorities reflected in SDG Targets 4.2 and 4.c. The Kindergarten Education Policy is fundamental to this achievement. It provides funding to kindergartens, enabling free education for 15 hours per week for children aged three to six years old (Education Bureau, 2016). The policy also enhances teacher quality through improving teacher qualifications, continuous professional development and providing funding for improving teacher qualifications.

Implementing SDG 4

- Target 4.2: Free and quality pre-primary education is provided
- Target 4.c: Teacher quality is enhanced through pre- and in-service training

Context

In Hong Kong (SAR of China) the main challenge regarding pre-primary education lies in the free market system of privately-owned kindergartens. The quality of kindergartens can vary considerably and a unified system for measuring teacher quality is not in place.

Kindergarten Education Policy

The Free Quality Education Kindergarten Policy (FQKEP) focuses on improving teacher quality to provide high-quality and affordable pre-primary education and care for children aged three to six years old. Improving teacher qualifications and competence has been key to catering for the diverse needs of students, while also working towards meeting Targets 4.2 and 4 c.

Improving kindergarten teacher qualifications and competence is key to catering for the diverse needs of students.

Key activities

The policy has been implemented by Hong Kong (SAR of China) Education Bureau since the 2017/18 academic year, focusing on the following four interlinked strategies:

- Increased professional qualification requirements
- Linking performance measures with financial support
- Continuous professional development policy
- Formulation of a teacher competencies framework

The human and financial resources available are provided by both government bureaus and departments and supported by government funding, in addition to the overall support from Hong Kong (SAR of China) Education Bureau.

Success Factors

The proportion of qualified teachers has increased, with the percentage of teachers holding at least a certificate in ECCE increasing from 37.3 per cent in 2007/08 to 95.4 per cent in 2019/20 (Education Bureau, 2020). Among those teachers that remained untrained, many started to pursue a formal qualification. Since 2017/18, the pupil-teacher ratio has improved by 5 per cent in kindergartens from one teacher for every ten children, to one teacher for every 9.5 in 2019/20 (Legislative Council, 2020).

Hong Kong (SAR of China) Education Bureau has also been conducting Quality Reviews. One third of all kindergartens receiving government subsidies from the FQKEP scheme were assessed between September 2017 and January 2020. The review showed that those assessed met the required standard on 21 Performance Indicators, including structure and vision, administrative affairs, collaboration and support, and professional development, among others (Legislative Council, 2020).⁴⁴

Key success factors

- Political commitment to ensure sustainable teacher quality improvement and political support.
- Clear vision and objectives formulated in the policy, covering SDG Targets 4.2 and 4.c.
- Responsive policy-making to enhance teacher quality and a focus on continuous
 professional development to address the unique needs of the local ECCE system and
 align with global trends in ECCE policies and practices.
- Financial incentives to guarantee participation of kindergartens.
- Consistent effort to make long-lasting improvements in teacher quality.
- Quality monitoring to ensure effective implementation of the FQKEP.

The effectiveness of the policy has been attributed to its quality assurance framework. This includes a School Self-evaluation conducted by kindergartens and a Quality Review of the kindergarten,

conducted by inspectors from the Education Bureau. Both the School Self-evaluation and Quality Review are conducted based on clearly specified Performance Indicators.

Efficiency is ensured by distributing government funds to kindergartens according to teacher quality. All kindergartens must refer to the Teacher Competencies Framework,⁴⁵ which includes a combination of qualitative and quantitative indicators. This has allowed for sustainable change and increased teacher quality in Hong Kong (SAR of China) private kindergartens.

Applicability

Hong Kong's (SAR of China) strategy of linking financial incentives to specific quality assurance policies has proven highly effective in the case of FQKEP. The policy-based approach has been key to the gradual progression in improved teacher quality, as evidenced by the requirements in professional qualifications and continual professional development of teachers, and training targets for kindergartens to strengthen support provided to teachers in catering for student diversity. Other countries could look to designing similar policies for privately-run kindergartens with the support of a lead ministry that can ensure implementation.

It is important, however, to consider the unique needs of each country context. For instance, in countries with public kindergartens, and where funding structures might be different, the implementation of a similar policy would be a challenge. Countries should also consider different socio-economic and socio-demographic backgrounds with regard to their policy landscape and status of kindergartens. Nonetheless, factors such as political and financial support will likely make a positive difference in kindergarten teacher quality in most countries.

Sustainability

Access to quality pre-primary education is crucial to ensure learning throughout life. It influences a child's future education, career and opportunities. Sustainable changes in pre-primary education therefore require policies focused on accessibility, equity and quality (Britto, Yoshikawa and Boller, 2011). In countries where pre-primary education is in high demand, the strategies employed under the FQKEP demonstrate how financial incentives and regular evaluation can be key to driving, and sustaining, teacher quality in ECCE. Indeed, in the case of Hong Kong (SAR of China) the allocation of the government's recurrent funding allocations for teacher training and quality monitoring of kindergartens has been key to financial sustainability.

The policy examined in this case study offers scope for expansion. However, its long-term sustainability may depend on funding availability and can be further informed by large-scale evaluation studies. Nonetheless, the success achieved by this policy so far will at least remain for the current generation of kindergarten teachers in Hong Kong (SAR of China).

Conclusion

This case study demonstrates how political commitment, monitoring and financial incentives can be key to driving teacher quality in pre-primary education. While this approach applies to market economies with a private kindergarten system, its allocation of funding for improving teacher quality, combined with a quality assurance framework, could also work in different environments and country contexts. It also points to the importance of measurable indicators – a crucial approach for measuring the success of SDG 4 and its targets.

3 Monitoring the Right to Education

in Pakistan

Transparency and Accountability

- 'Accelerating Implementation of Right to Education and SDG 4 as Social Justice' implemented by Idara-e-Taleem-o-Aagahi (ITA)/ ASER Pakistan with support from Foundation Open Society Institute (FOSI) Pakistan.
- Templates and trainings for monitoring and reporting all SDG 4 targets in three Pakistani provinces.
- SDG 4 tracking template, handbook, training manual and toolkit on SDG 4.
- Provides trainings for political leaders and legal fraternity to understand and implement SDG 4.
- Consultative and collaborative approach by working with different stakeholders.
- Transparency and accountability for implementing the Right to Education in Pakistan.

Summary

Pakistan added the Right to Education (RTE) in 2010 in its constitution. Pakistan's RTE campaign is concerned with enforcing education laws in Pakistani provinces, and with implementing SDG 4 nationwide. This case study examines the project titled 'Accelerating Implementation of Right to Education and SDG 4 as Social Justice' by Idara-e-Taleem-o-Aagahi (ITA) a trust that works with public education providers, which monitors the implementation of all targets of SDG 4 and of the related RTE Acts in three Pakistani provinces. It also examines activities in addition to the creation of an annual report, which includes tracking templates, SDG 4 handbooks, toolkits and a training manual for various education stakeholders.

Implementing SDG 4

 All SDG 4 targets: The 'Accelerating Implementation of Right to Education and SDG 4 as Social Justice' project contributes towards achieving all targets of SDG 4 by providing data for targeted policy interventions.

Context

Pakistan has anchored the Right to Education in article 25a of its constitution (Pakistan, Nd.), which was added in 2010. It was accompanied by an advocacy campaign called RTE Pakistan, which has been implemented by the the NGO Idara-e-Taleem-o-Aagahi's – Center of Education and Consciousness.

The lack of data pertaining to SDG 4 in Pakistan makes it difficult for government ministries and departments to evaluate their progress towards the different targets. This also makes it more complicated to reach the constitutional goal of Right to Education for all, which is closely linked to SDG 4 (Target 1). As a result of this lack in data, however, it also means that most educational policies in Pakistan are not evidence-based (ITA, 2020) and that the country is struggling to find evidence for the implementation of its flagship policy RTE.

The new tracking reports generated under the project intend to accelerate the Right to Education and the implementation of SDG 4 in Pakistan. It aims to enhance the government's capacity by providing the provincial governments of three Pakistani provinces with the required information for effective policy-making. On a national level, it is hoped that both the legislature and judiciary will become more aware of SDG 4's targets and indicators. In the future, it is expected that the report will contribute towards the Right to Education in Pakistan by providing transparency and accountability.

Accelerating Implementation of Right to Education and SDG 4 as Social Justice

The core objective of the 'Accelerating Implementation of Right to Education and SDG 4 as Social Justice' project, which is financially supported by the Foundation Open Society Institute (FOSI) Pakistan, is to establish a mechanism in school education departments that helps to monitor and report all SDG 4 targets and indicators. By tracking the implementation of the goal, credible evidence on its status in each province will become available, holding stakeholders accountable for lacking performances in those provinces that are not on track for SDG 4 target implementation. Capacity-building is another important part of this undertaking, as is awareness raising among citizens about the importance of SDG 4 and the Right to Education.

Three of Pakistan's most densely populated provinces – Punjab, Sindh and Khyber Pakhtunkhwa (KP) – are participating in the project. The reporting has been ongoing in these provinces since February 2019. ITA is the main actor in the reporting process. ITA works collaboratively with stakeholders at all levels in producing the annual tracking reports and the relevant material: ranging from ministries, school education departments, provincial SDG support units, and country offices of international development partners, to parliamentarians, media, legal entities, the Pakistan Institute of Parliamentary Services and local civil society organizations.

Monitoring reports providing transparency and accountability can make a country's national and regional governments more aware of SDG 4's targets and indicators.

Key activities accompanying the annual report include:

- Development of tracking reports on SDG 4 and RTE for three provinces.
- Creation of a template for monitoring progress on SDG 4, based on UNESCO and UIS resources.
- Publication of a Handbook on the Right to Education and SDG 4 (ITA et al., 2019).
- Provision of a toolkit on monitoring, including a step-by-step guide for tracking SDG 4 implementation.
- Preparation of a training manual for SDG 4 training and required resources.
- Arrangement of advocacy dialogues and media coverage to raise awareness of SDG 4.

Success Factors

Results of ITA's efforts include the creation of a template, provincial tracking reports, the handbook, the toolkit, and the training manual – all of which are public goods and accessible to all. In addition, advocacy dialogues have helped to increase awareness of SDG 4 among many different stakeholders in Pakistan, including among the general public. Related trainings and capacity-building activities with various stakeholders are also contributing towards the implementation of the RTE under ITA's campaign.

So far, two provinces have announced the establishment of a dedicated SDG 4 Unit for monitoring progress towards the Right to Education in their respective ministries. According to ITA, political willingness and support from relevant stakeholders are key for the success of the report and its accompanying activities.

This ownership of respective regional governments and other stakeholders ensures effectiveness since it makes successful implementation of the activities to promote RTE and SDG 4 in Pakistan more likely. ITA is confident that the information collected and the accompanying activities will be translated into evidence-based policies, education sector planning and the implementation of SDG 4-related programmes in Pakistan. By collecting data and working transparently through proper reporting mechanism, the functioning of government ministries and departments is expected to be improved. The tracking reports provide a benchmark for progress towards SDG 4, thus making performance in Pakistan's education sector more efficient and goal oriented.

Key success factors

- **Ownership** by both provincial and national government to ensure sustainable implementation of monitoring activities.
- Transparency by providing an open-source document to allow for cooperation of different stakeholders and to create accountability.
- **Capacity-building** of relevant school education departments, politicians, legal fraternity and other stakeholders to improve their implementation of SDG 4.

- An array of tools, handbooks and accompanying activities to facilitate the implementation of SDG 4 in practice.
- Focus on efficiency to minimize workload.
- **Clear instructions** for goal-oriented education policies to avoid misinterpretation and to ensure a common understanding of education priorities in all of Pakistan.

Applicability

This case study serves as an example of how other countries can design their own tracking mechanisms and monitoring techniques to maintain an overview of progress towards SDG 4 targets, as is the case with Indonesia's SDG 4 Monitoring Report (see previous case study). Pakistan's experience can serve other countries, as the monitoring template and accompanying toolkit could be adapted to the local context. Challenges might arise where the Right to Education is less prioritized than it is in Pakistan, but through involving different stakeholders such as the government, continuous monitoring and subsequent adaptation of education policies can help to implement SDG 4 in any country.

Sustainability

The sustainability of the project and its SDG 4 monitoring activities is assured by making government ministries, departments, and other key stakeholders a key part of the process. Most importantly, provincial governments in the three participating provinces have taken ownership of SDG 4 monitoring activities and are therefore able to track the progress within their own province. It is expected that they will share the collected information with all relevant stakeholders and with the national government on an annual or bi-annual basis. Ownership of government and other stakeholders is an important element of Pakistan's RTE activities, since these actors will continue to track and monitor educational policies in the long term, making sustainable changes more likely.

Conclusion

Pakistan's experience with the 'Accelerating Implementation of Right to Education and SDG 4 as Social Justice' project showcases the importance of government support and local ownership for SDG 4 monitoring. By involving provincial governments and other stakeholders, ITA has succeeded in making its tracking reports effective and sustainable in the long run. Accompanying activities such as the publication of step-by-step instructions, toolkits, as well as media advocacy and capacity-building are also important elements of efficiently measuring progress towards SDG 4 targets, thus contributing to the sustainable implementation of the Right to Education campaign in Pakistan.

4 SDG 4 Monitoring

in Indonesia

Monitoring and Governance

- SDG 4 monitoring report developed by the Ministry of Education and Culture's Planning Bureau in cooperation with UNICEF and other partners.
- Supports the Indonesian government in monitoring SDG 4 achievement at national level.
- Complements an SDG 4 Baseline Study to provide a comprehensive overview.
- Covers 2015–2018 in analysing progress towards all 82 SDG 4 indicators.

Summary

In Indonesia, UNICEF has collaborated with the Ministry of Education and Culture's Planning Bureau to develop an SDG 4 Baseline Study, followed by an SDG 4 Monitoring Report. Together, these publications provide comprehensive information regarding the status of SDG 4. The Baseline Study Report was launched in November 2018 and illustrates the status of SDG 4 indicators at the beginning of SDGs implementation in 2015. In addition, the Monitoring Report describes the progress towards all indicators covered in SDG 4's ten targets over a 3-year period (2015–2018). The report also contains analysis on the impact of the government's policies and programmes for the achievement of SDG 4 and its targets.

SDG 4 relevance

Indonesia's SDG 4 Monitoring Report covers all ten targets and 82 indicators of SDG 4.

Context

Indonesia, like many countries, faces the challenge of limited knowledge and understanding of SDG 4's monitoring process among government stakeholders – especially to measure achievement of its targets and indicators. Significant data gaps for SDG 4 monitoring contributes further to this challenge. There also lacks knowledge with regard to exactly what kind of data is required for the SDG 4 monitoring process.

SDG 4 implementation can be crucially supported by using monitoring results in local and national education planning and policies.

Nonetheless, Indonesia has included SDG 4 indicator variables into existing government data collection mechanisms. The country's SDG 4 Monitoring Report is an attempt to improve the implementation of SDG 4 through enhanced monitoring at national level, while also utilizing the results of the report to highlight topics and issues which should become priorities in the next education sector plan.

Indonesia's SDG 4 Monitoring Report

This case study highlights the alignment of Agenda 2030 with Indonesia's education sector plan through the SDG 4 Monitoring Report, which was developed in Jakarta, the country's capital. Work on the report began in February 2019, and it was finalized one year later.

The SDG 4 Monitoring Report is the result of collaboration between UNICEF, the Ministry of Education and Culture's Planning Bureau, the SDG Centre at Padjadjaran University, and Central Bureau of Statistics. It also involves the National Planning Board, Indonesia's SDG National Secretariat, and other relevant units at the Ministry of Education and Culture.

By analysing SDG 4's ten targets and 82 indicators, the report intends to understand the overall progress towards SDG 4, including on annual progress, so that necessary actions can be undertaken to ensure achievement of SDG 4 targets by 2030. The report is expected to become a key reference for strengthening relevant government policies and programmes that could support achievement of the SDG 4 targets by 2030.

Some distinctive features of Indonesia's SDG 4 Monitoring Report include:

- Quantitative analysis of 78 indicators.
- Qualitative analysis of four indicators.
- Verification and validation through focus groups and in-depth interviews.
- Advocacy and consultation meetings with key government stakeholders on the structure and methodology for developing the report.
- SDG 4 capacity-building workshops and training to equip relevant stakeholders with sufficient knowledge of SDG 4 targets and indicators, as well as the global methodology used for their analysis.
- Workshops on SDG 4 data processing and analysis, including analysis on government programmes and policies that contribute to the achievement of SDG 4 targets.
- Consultation workshops to review the accuracy of content of the report.

Success Factors

Indonesia's SDG 4 Monitoring Report provides a reference for aligning Agenda 2030 with the country's education sector plan. More specifically, both the SDG 4 Monitoring Report and the SDG 4 Baseline Study serve as a contribution to the monitoring and indicator frameworks of the Indonesian National Medium Term Development Plan and the Ministry of Education and Culture's Strategy for 2020–2024.

Key success factors:

- Proactive monitoring to assess achievement of all SDG 4 targets in Indonesia.
- Cooperation with government and Ministry of Education to advocate and encourage the willingness to learn and to adapt based on monitoring results.
- Closing data gaps to make sure that all targets can be monitored accordingly.
- Clear guidelines to enable widespread use among different actors.
- Training and capacity-building to facilitate transfer of knowledge and ensure sustainability and understanding of the SDG 4 indicators data analysis.

The report has also been an effective basis for both human and financial resource allocation at government level, making it easier to work towards SDG 4 targets in the future. The analysis has served as input for the government in evaluating related policies and programmes.

In addition, the report is also efficient, since it actively involves the participation of relevant government stakeholders throughout the process. This is meant to facilitate the transfer of knowledge as well as enhance capacity-building. As part of this initiative, Indonesia's Ministry of Education and Culture is expected to publish an annual SDG 4 monitoring status based on this Report.

Applicability

This initiative is the first of its kind in the region. It can easily be replicated by other countries who have similar concerns with regard to SDG 4 monitoring. Political will, coordination across institutions and financial support, as well as capacity-building, are all important factors when replicating this case study. While it might be a challenge to convince governments to dedicate time and resources to continuous monitoring efforts, support and funding from an international organization such as UNICEF can help to make monitoring more attractive to policy-makers.

Sustainability

The SDG 4 Monitoring Report for Indonesia has provided relevant guidelines for government stakeholders. These can be used in different contexts for evaluating the success of SDG 4-related policies and programmes, making the report sustainable beyond the timeframe of its immediate analysis (2015–2018).

Knowledge transfer and capacity-building are also crucial to ensuring the sustainability of the report in the future. These measures therefore contribute to improved data analysis capacity, data sources and data availability, making SDG 4 implementation easier and more streamlined across the country.

Conclusion

Indonesia's SDG 4 Monitoring Report shows that clear and continuous monitoring of SDG 4 targets and indicators is important for their implementation and achievement. In addition, support from an international organization such as UNICEF, along with the cooperation of various government stakeholders in Indonesia, has enabled provision of strategic and valuable inputs towards establishment of targeted education policies and programmes. Through this initiative, Indonesia demonstrates its commitment to continuously improve and adapt. This flexibility, in combination with sustainable measures such as capacity-building and improved data collection, means that Indonesia is well-equipped for making progress towards achieving SDG 4.



5 Building Leadership for Sustainable Development

in Central Asia and Afghanistan

Leadership and Cooperation

- Central Asian Leadership Programme on Environment for Sustainable Development (CALP)
- Unique capacity-building programme in Central Asia and Afghanistan
- Trained almost 300 young professionals since 2010
- Focus on water management, climate change, leadership and regional cooperation
- An example of cooperation among countries within a sub-region and scalability

Summary

The Central Asian Leadership Programme on Environment for Sustainable Development (CALP) is a **unique capacity-building programme** by CAREC (Regional Environmental Centre for Central Asia) undertaken since 2010. This CAREC flagship programme is designed to improve leadership capacity of mid-level managers of various government agencies (education, foreign affairs, economy, environment, water, energy), and focuses on various challenges for sustainable development in the sub-region. Since 2010, more than 325 young and mid-management professionals have graduated from the CALP programme, including 46 new leaders that participated in the 11th CALP on September 14–18, 2020.

Implementing SDG 4

- Target 4.3: Access to education for men and women is ensured with a focus on gender balance
- Target 4.4: The number of youth and adults with relevant skills is increased
- Target 4.7: Knowledge and skills for the promotion of sustainable development are enhanced

Context

Central Asian countries such as Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan and Afghanistan have ethnically and linguistically diverse populations. They also face a number of climate-change related challenges, such as incoherent climate governance despite shared ecosystems, and water resources pollution (UNESCO Almaty, 2018). These challenges make sustainable development and water management key concerns. In addition, Central Asian countries share similar socio-economic challenges including:

- Transition towards a market economy
- Provision of basic services
- Citizen participation
- Accountability of public institutions

The Central Asian Leadership Programme on Environment for Sustainable Development (CALP)

The CALP programme, which is coordinated by CAREC, aims to improve the role and capacity of 'new generation' managers. It is hoped this will lead to an increase in regional leaders who think globally and have a sub-regional vision for cooperation in Central Asia, while also applying innovative approaches in their work. CALP alumni will tackle global and regional challenges such as water management, climate change, gender equity and the environment with their high qualifications and skills for sustainable development. A comprehensive understanding of the environmental challenges in Central Asia, and the world, is crucial for the implementation of the capacity-building training that CALP provides.

With CALP, CAREC intends to promote youth connectivity in Central Asia by providing a neutral platform for dialogue on implementation of the SDGs in the sub-region. A special focus of CALP also involves providing quality training to young professionals, linking directly to SDG 4.4. This capacity-building initiative will enable them to work cooperatively and comprehensively on topics ranging from water cooperation to gender equality, energy efficiency, ecosystems and ESD (Education for Sustainable Development), as well as learning mediation skills by working with different stakeholders.

Since its launch in 2019, CALP's capacity-building programme activities take place annually in one of the six participating countries.⁴⁶ Training programmes, conferences and sharing platforms form a key part of CALP, bringing together stakeholders such as the government, academia, the private sector and civil society. Through its regional approach, CALP receives financial support from UNEP, the Government of Norway, the OSCE Programme Office in Nur-Sultan, Kazakhstan, USAID, the World Bank, the OSCE Secretariat, the European Union and CAREC itself.

Success Factors

CALP has seen growing success in the last 11 years, with an increase in the number of participants and of participating countries. Graduates of the capacity-building programme are also making

Inclusive leadership is key to achieving the SDGs.

significant contributions to the promotion of regional cooperation and sustainability. At the same time, leaders from Central Asia and Afghanistan are using CALP as a neutral platform for dialogue, discussing advances and best practices in water, gender, climate change and other topics pertinent to sustainable development.

By focusing on youth and gender equity in its leadership training, CALP has successfully managed to create an inclusive network. This approach of inclusive leadership is key to achieving the SDGs. The programme has also improved dialogue in Central Asia and demonstrates the powerful role of leadership by equipping future decision-makers to understand complex environmental and sustainable development issues from a local, but also global, point of view. As part of the capacity-building programme, they have also become skilled in diplomacy and can negotiate and mediate in a gender-responsive manner.

Key factors for success

- Open contest to participate in CALP to implement an **inclusive approach** to education (Target 4.3).
- Annual mobilization of funds from global and local partners, and the private sector to ensure sufficient resources.
- Focus on **relevant skills** to prepare future decision-makers and youth for leadership roles (Target 4.4).
- **Innovative approaches**, instruments, and programmes to enhance knowledge and capacity-building.
- Establishment of an alumni network to support cooperation within Central Asia and among participating countries.
- Highlighting the importance of environmental and water diplomacy and cooperation to raise awareness of sustainable development (Target 4.7).

Recognition of the capacity-building programme by local partners has been key to its effectiveness. This is demonstrated by the amount of official nominations from governments for their employees to participate in CALP. Furthermore, CALP contributes to the implementation of SDG 4.4 by increasing the number of youth and adults with relevant skills, aiming to educate future leaders to maximize its impact. Indeed, the programme's alumni network of 325 specialists continue to contribute to joint meetings, activities, and the exchange of best practices, thus also ensuring future effectiveness of the programme.

Applicability

CALP focuses on transboundary water diplomacy, climate and regional cooperation via shared bodies of water in Central Asia. The joint mountain and water ecosystem are crucial for cooperation, as is the countries' shared history with regard to the former Soviet Union. Despite this opportunity, different geographies in sub-regions and different languages spoken in participating countries pose potential challenges. Nonetheless, the inclusion of Afghanistan has shown that programmes for leadership and coordination can also be applied to other countries that do not share the same language.

Sustainability

As a leadership and coordination platform, CALP is sustaining its practices through its annual activities, information dissemination, the communication of success stories, regular climate change conferences, as well continuous cooperation in the sub-region. The programme does, however, also face a number of threats such as differences in governance and resource deterioration (UNEP, 2007). Nonetheless, CALP is working to sustain its partnerships and funding in order to sustain its activities.

Conclusion

The success of CALP lies in thinking globally, cooperating regionally and acting locally. While the leadership and capacity-building platform is managed at a regional level, the programmes can easily be scaled up and transferred to other countries. By ensuring transparency through online events, annual conferences, and continuous follow-up with alumni, CALP has a long-lasting impact. CAREC also places particular emphasis on gender equity and inclusion, which has enabled the programme to contribute towards achieving three SDG 4 targets.



6 Non-Formal Education for Rural Women in India

MPowered Application

Non-Formal Education and Sustainability

- Enabling prosperity for 1,800 rural women through non-formal, experiential learning
- Smartphone-based training on sustainable livelihoods for sustainable development
- Using internet and digital skills to make improved and smart choices
- Harnessing the collective power of the community for the transfer of knowledge
- Enhancing participation of women in family and community decision-making processes

Summary

The MPowered project aims to provide community-based Education for Sustainable Development (ESD) to 1,800 poor women in India through a mobile application called Package of Practices (PoP). Conceived by Tata Communications and Trickle Up, the application encourages non-formal and experiential learning on sustainable development through lessons in local dialects designed for non-literate women. These lessons result in improved agricultural yields, more sustainable farming practices and empowerment of participating women, who also share their lessons with their peer groups, thus becoming agents of social change.

Implementing SDG 4

• Target 4.7: acquisition of knowledge and skills for sustainable development, promotion of human rights and cultural diversity of women in poor rural communities in India.

Context

Living in remote parts of the Indian states of Jharkand and Odisha, members of the Ho tribe are part of an excluded social group which has been designated a Scheduled Tribe⁴⁷ due to a long history of marginalization. Many households from this group are ultra-poor, living on less than US\$1.25 per day), with women at a particular disadvantage. They face the compounded effects

⁴⁷ In India, Scheduled Tribes are indigenous social groups who have 'suffered from extreme social, educational and economic backwardness' due to a history of marginalization. Such groups have been given 'special consideration for safeguarding their interests and for their accelerated socio-economic development' by being designated as Scheduled Tribes. National Commission for scheduled tribes, Govt. of India (2020) can be found online here.

of challenges such as extreme poverty, distress migration, systemic exclusion, dependence on external support, as well as a lack of literacy and numeracy.

Tata Communications and Trickle UP seek to overcome these challenges through encouraging non-formal, experiential learning for sustainable development with the help of the PoP app.

MPowered's mobile application for non-formal, experiential learning

India's Tata Communications and the NGO Trickle Up have developed the PoP application in alignment with the Corporate Social Responsibility vision at Tata Communications. Initiated in October 2015, MPowered is eradicating extreme poverty and creating sustainable communities amongst some of the most vulnerable population groups. As part of the MPowered programme, smartphones (pre-loaded with the PoP application) were provided to all 1,800 participating women, as well as complementary enablers such as formal trainings for using the smartphones and small cash grants. Designed for first-time users, PoP has proven to be a crucial tool for driving inclusive growth while promoting 'ESD' in non-formal settings.

Key features of the PoP application:

- Promotion of an inclusive and ecological approach to ESD which recognizes traditional knowledge, expands life-long learning and enables sustainable livelihoods.
- Rolled out with a provision of smartphones and formal training.
- Easy-to-use application with user-inspired design.
- Creation of systems of support with community self-help groups, community coaches for regular support and sustained long-term handholding.
- Building self-reliant communities and their societal and economic inclusion with the required knowledge, tools and networks.
- Enhancing the life situations of its women participants by supporting them in their journeys of pursuing viable, stable, local and sustainable livelihood choices.

Key to the success of the PoP application is its availability in regional dialects such as Odiya, Santhal and Ho – making it more inclusive and accessible. It also includes training modules on the organic cultivation of crops and basic financial management for sustainable livelihood generation. Design features such as visual cues, photos and voiceovers, were especially important in making the application user-friendly for users with low levels of literacy and numeracy.

The context-sensitivity and user-inspired design of the MPowered application resulted in effective and consistent use of the application. The PoP application includes local adaptations and lessons to ensure mutual and sustainable learning. This iterative development of the app was largely based on learning from participant uptake, feedback and monitoring, making customized support for users possible. Eighteen months into the programme, 87 per cent of the participating women were using the lessons in the PoP application to support organic cultivation of their crops, thus showing their acquisition of skills and knowledge for sustainable development (Target 4.7) despite the context of illiteracy. Almost all participants said they planned to continue referring to the application after having seen improvements in their agricultural yield.

A context-sensitive and user-inspired application can help to acquire skills and knowledge for sustainable development even in contexts of illiteracy.

The efficiency of the programme is visible in increased income, stable and sustainable livelihood choices, as well as the fact that 63 per cent of the participating women were able to start small businesses. Migration sensitive households were also able to stay together protecting the integrity of the households and promoting a healthier life quality, rather than have members migrate to urban centres in search of work.

Not only did MPowered benefit 1,800 women, but it also benefitted other members of their community. Participating women shared their lessons with community groups, neighbours and friends, which intensified their local, social relations. Ninety-eight per cent of participating women also became active participants in community gatherings taking part in decision-making processes (ibid).

Key features for success:

- **User-friendly application** broken down step-by-step and introduced through sequential training to make it easy to use for women with extremely low literacy levels.
- **Availability in local dialects** to guarantee that local tribes can use the application in their own language.
- **Context-sensitive features** allowing for relatability such as inclusion of visual cues, photos and voiceovers and mirroring of local adaptations for land measurement etc.
- **Locally-led trainings** for promoting the correct use of the application and to explain the technology in a way that is sensitive to the local culture.
- **Regular workshops** for troubleshooting and to ensure correct implementation of sustainable practices.
- **Dedicated community coaches for peer-based learning** to facilitate learning with and from other participating women.
- **Continuous monitoring and optimization** of the application to consistently improve its features based on user experiences and local conditions.
- Provision of **solar chargers** for households without electricity to ensure continuous use of the learning materials in the smartphone app.

Applicability

MPowered demonstrates the importance of context-consciousness and sensitivity in order for transferability and applicability to other contexts. It is now in its second phase of implementation, engaging 2,800 new project participants from two new locations. Phase 2 will include complementary infrastructure, such as repair shops, and intends to further enhance knowledge and skills on sustainable development among participants through capacity building on various

topics linked to SDG 4.7 such as WaSH, health, nutrition, and education through systematic coaching both at household and at group levels. These developments show that by learning from the local context and extending mutual respect to local knowledge traditions, it is possible to create a learning programme for sustainable development suitable to contexts with multiple development challenges.

Lessons for applicability

- **Age**: Younger participants aged 18–35 achieved best crop yields and showed most interest in continued use of the application.
- **Mutual respect**: Learning from the sociocultural nuances of the context is crucial to build relatability and encourage uptake.
- Creating systems of support: 70 phones had to be replaced, suggesting the need for more durable hardware; similarly, solar chargers were provided to account for lack of electricity.
- **Complementary local infrastructure**: In phase II, trainings on repairing solar chargers and basic phone repair have been added to the programme to ensure sustainability.
- Designing for all: In phase II, the application shall be more inclusive with text to speech technology for reading of content, to provide messages on WaSH and notifications of social support schemes.

Sustainability

MPowered demonstrates a high level of sustainability by following a gradual approach to ESD precisely through skills and knowledge transfer, as well as a holistic set of complementary trainings. By improving livelihood planning, giving out cash grants (of INR 3000 – equivalent to 39.98 US Dollars⁴⁸ – per participant) for investment in agricultural activities and by integrating the project into communities, participating women benefit from ESD and also share it with their peer groups.

Conclusion

MPowered's success through a user-friendly mobile application and related initiatives rest on consideration of the local context – whether in terms of language, capacity and literacy levels, or infrastructure. Trainings, provision of solar chargers for households without electricity and the continuous improvement of the application were key for the project's implementation. By making ESD relevant to the everyday life of participants, results were achieved quickly and spread across communities. In its first phase alone, MPowered promoted sustainable development, appreciation of local culture and empowerment of women through increased knowledge and skills related to SDG 4.7, in an extremely challenging context.

7 Mother Tongue-Based Multilingual Education

in Thailand

Inclusive Teaching Methodologies

- Introduction of mother tongue-based and multilingual education in Thailand
- · Creation of locally-relevant curricula in line with Ministry of Education standards
- Cooperation with six minority language communities
- Use of interactive teaching methodologies
- Longitudinal studies proving the success of multilingual education

Summary

As a country with more than 70 minority languages, Thailand faces linguistic challenges when it comes to education provision. While some of these minority languages are endangered, others are spoken by hundreds of thousands of people (UNESCO Bangkok, 2019). Many ethnic minority children do not speak Thai, the country's official language, when they enter school, resulting in lower academic performance. Since 2006, a network of Thai individuals and organizations has been working to address the issue by introducing MTB-MLE education into Thailand's school curricula. As a result, this initiative has not only contributed to developing new curricula in line with the Ministry of Education's standards, but also relevant professional development for teachers. Longitudinal studies have also been conducted to measure the impact of this approach and ensure the sustainability of these efforts.

Implementing SDG 4

- Target 4.1: MTB-MLE allows equitable access to quality education and higher success rates of children from indigenous-language backgrounds in Thai-speaking schools.
- Target 4.4: Strong academic and Thai language gains of children in MTB-MLE programmes in Thailand provide skills needed for future employment in decent jobs.
- Target 4.5: MTB-MLE improves access to quality education for vulnerable ethnic minority children, specifically addressing indicator 4.5.2.⁴⁹

- Target 4.6: MTB-MLE in Thailand improves literacy and numeracy skills for children and youth.
- Target 4.7: MTB-MLE in Thailand builds appreciation for cultural diversity

Context

Thailand's education system struggles to support ethnic minority children to improve their literacy and develop adequate Thai language abilities, which leads to a socially stigmatized accent, loss of mother tongue language, culture and traditional knowledge, as well as a limited transition to higher levels of education.

MTB-MLE's 'first-language-first' approach aims to overcome these struggles, whereby schooling begins in the mother tongue (also known as first or home language) and later transitions to other languages such as Thai and English.

MTB-MLE in Thailand

Thailand's various MTB-MLE programmes use the learner's mother tongue as a base for educational excellence. By developing a culturally relevant curriculum, taught in an engaging manner, teachers can systematically and continuously build upon a child's existing knowledge.

Existing initiatives include the Patani Malay-Thai Multilingual Education Programme in the south of the country, as well as programmes in five different languages in the north. In total, approximately 3,000 children have benefitted from these programmes, with over 100 teachers and teaching assistants trained. The longest-standing project has lasted 14 years, while new schools entered official or modified programmes as recently as 2019.

Various stakeholders have contributed to the development of these programmes, including: parents, teachers, and artists from project area communities; academics from Mahidol University and Yala Rajabhat University; community development staff from the Foundation for Applied Linguistics, the Pestalozzi Children's Foundation, and the Child's Dream Foundation; officials from the Ministry of Education and the Thailand Research Fund; and international advisors from UNICEF, UNESCO, and SIL International. UNESCO Bangkok's MTB-MLE Resource Kit has also been crucial to Thailand's MTB-MLE programme development.

Core activities of the MTB-MLE resource kit:

- **Preliminary research**: understanding the local linguistic situation and educational issues.
- **Realistic planning**: an average of one year to develop resources for schools.
- **Awareness-raising and mobilization**: helping parents, community leaders and local education officials understand the intervention.

- **Material creation**: cooperating with local artists, storytellers, musicians and teachers to develop engaging mother tongue materials.
- **Training teachers and their assistants**: using materials as intended and understanding the rationale behind the MTB-MLE approach.
- Monitoring and evaluation: checking the progress of students and programme managers.
- **Establishing supportive partnerships**: including stakeholders from local, national and international levels.
- Advocacy: encouraging local and national policies that are supportive of MTB-MLE in Thailand.

Success factors

MTB-MLE programmes in Thailand have brought significant positive results for ethnic minority children and their communities. These include improved Thai language skills, improved learning across all subjects, improved performance in national standardized tests, and increased parental involvement in local schools. Policy-level impact has followed: the Office of the Basic Education Commission's annual policy statements for 2019 and 2020 highlight the needs of children speaking local languages in remote and island areas, while the Royal Society of Thailand's National Language Policy Implementation Plan (submitted to the cabinet in March 2020) supports mother tongue-based education for all Thai children.

The effectiveness of the MTB-MLE programmes rests in careful planning and supervision. By teaching indigenous children Thai language skills, their performance in other school subjects also increased,⁵⁰ leading to more equitable access to higher education and job opportunities. Thailand's MTB-MLE practitioners have forged links with two of the main regional teacher training institutions, which have developed MTB-MLE coursework for teacher trainees as a result.

Teaching indigenous children Thai language skills increases their performance in other school subjects and creates equity in access to higher education and jobs.

⁵⁰ MTB-MLE students in Thailand outperformed students in comparison schools in several subjects, according to annual evaluations carried out by Yala Rajabhat University, as well as in the Thai government's Grade 6 standardized Ordinary National Education Test (O-NET) and annual primary grade Literacy Test (LT) (Pestalozzi, 2019).

Key features for success:

- Inclusion of culturally relevant learning content and methodologies (storytelling, local artists and traditional musicians etc.) to ensure a first-language-first approach to learning.
- Involvement of parents and community leaders in planning learning materials to support homework.
- Importance placed on realistic planning to make time for adapting the resources where necessary.
- Mentoring teachers, teacher trainees and school administrators to achieve sustainable change on MTB-MLE.
- Advocacy by MTB-MLE implementors to influence decision-making in the government.

Applicability

In other countries with similar challenges with regard to multilingualism, MTB-MLE experiences from Thailand can serve as inspiration. Certain aspects of Thailand's MTB-MLE experience are universal: preliminary research, advocacy and cooperation, the creation of orthographies, identification and training of teachers and teacher assistants, creation of locally-relevant learning materials and monitoring and evaluation.

It also highlights the need to start with a small pilot project and then expand while learning from initial results. This appears to be much more effective than starting with a large number of schools. Challenges might include the lack of a clearly identified Ministry of Education agency responsible for MTB-MLE at the national level, different local priorities, and scepticism from parents or community leaders – factors that should be considered by other countries as well. However, by continuously adapting the MTB-MLE resources and activities to local needs, and by placing importance on capacity-building and awareness-raising within government agencies, communities and schools, these challenges can be overcome.

Sustainability

Positive academic outcomes, ongoing teacher training, the fact that Thailand's MTB-MLE curricula are guided by Ministry of Education grade-level standards and recent positive policy developments all bode well for the sustainability of MTB-MLE in Thailand. These features could be replicable in other contexts.

Conclusion

MTB-MLE programmes in Thailand have been successful due to advocacy efforts, mentoring and sustainable learning through the inclusion of crucial stakeholders. Community involvement and the use of locally relevant cultural references have also contributed to the success of these programmes. By measuring success in longitudinal studies and by conducting standardized tests with comparison schools, the leaders of MTB-MLE programmes in Thailand have built a comprehensive evidence base to support MTB-MLE throughout the country and region.

8 Connect with Respect

Preventing Gender-Based Violence in Schools

Gender-transformative Teaching and Learning

- Programme addressing School-Related Gender-based Violence (SRGBV)
- Curriculum resource 'Connect with Respect' (CwR), piloted in several countries in Asia
- Promoting gender equality, human rights and non-violence, and social interaction skills building through school curricula
- Awareness-raising and skills development among teachers
- Promoting a whole-school approach to preventing SRGBV including monitoring evidence-based progress

Summary

The curriculum resource 'Connect with Respect: Preventing gender-based violence in schools' (UNESCO Bangkok, 2018c) was developed in 2015 by UNESCO and partners of the East Asia and the Pacific's UN Girls' Education Initiative (UNGEI). It intends to respond to SRGBV in Asia-Pacific countries, with a focus on fostering positive and respectful relationships among students, as well as between students and teachers. 'Connect with Respect' therefore aims to assist teachers in delivering a series of structured learning activities within, or in complement, to the school curriculum. This is intended to empower students to have respectful and gender-equitable relationships. These learning activities are supported by accompanying activities such as teacher capacity-building, in order to create safe and non-violent learning environments.

Implementing SDG 4

 Target 4.a: Building and improving education facilities that are gender-sensitive and provide a safe, non-violent, inclusive, and effective learning environment for all by addressing SRGBV through the delivery of the curriculum-based Connect with Respect (CWR) programme. Addressing gender-based violence requires a multi-sectoral approach and the education sector can be key by nurturing respect and gender-sensitivity among students and teachers.

Context

SRGBV has been a long-term challenge and concern in many societies of the Asia-Pacific region. Gender inequality, rigid gender norms and widespread systemic acceptance of violence are some of the major reasons young people in countries, including Thailand, both experience and perpetrate gender-based violence in, around, and on the way to school.

Addressing gender-based violence within a society requires a multi-sectoral approach, and the education sector can play a critical role in preventing and responding to SRGBV by nurturing positive and respectful relationships among students, as well as between students and teachers. To this end, CwR intends to address and prevent violence in schools through curricula and teacher training, with the goal of promoting transformative pedagogies and classroom practices that are gender-sensitive and contribute to inclusion and non-violence.

'Addressing gender-based violence requires a multi-sectoral approach and the education sector can be key by nurturing respect and gender-sensitivity among students and teachers.'

Connect with Respect

The main goals of the CwR programme are to build teachers' capacity in delivering teaching and learning activities that promote respectful relationships and prevent gender-based violence, and to promote a whole-school approach in addressing SRGBV. UNESCO Bangkok and UNGEI partners have therefore developed a programme where teachers, school staff and school directors are involved in serving as role models for students and taking preventive approaches such as gender-sensitivity trainings and monitoring success in schools to achieve SDG 4.a.

The programme focuses on building teacher capacity in delivering gender-transformative teaching and learning activities that promote respectful relationships, prevent gender-based violence and use a school-wide approach in addressing SRGBV. Through this approach, it is hoped that CwR can help achieve violence-free and gender-equitable school environments through its main resource, the CwR programme and teacher trainings.

CwR was conceived in 2014 following a UNESCO/UNGEI SRBGV review in the Asia-Pacific (UNESCO Bangkok, 2014) that showed how SRGBV continued to affect children in the region each year. UNESCO and the partners in the Asia-Pacific United Nations Girls Education Initiative (UNGEI) developed the lower secondary-level resource, 'Connect with Respect', which was authored by the University of Melbourne. In recent years to the present, with the support of UNESCO, UN Women and partners, the CWR programme has been piloted in Timor Leste, Thailand and Viet Nam, including a structured monitoring and evaluation (M&E) component. UNESCO led the CWR programme implementation in Thailand in 2018–2019 and conducted teacher training in Viet Nam in 2018.

Key activities of Connect with Respect:

- Producing the resource, which is available in English, Chinese, Myanmar, Thai and Vietnamese.
- Providing important foundational knowledge for teachers on gender-based violence.
- Providing teachers with learning activities across important topics such as gender norms, fairness, equality and human rights.
- Connect with Respect Monitoring and Evaluation data collection package produced in English and Thai.
- Orientation and capacity-building for school teachers, counsellors, education staff, ministries of education, parent associations and youth-supported NGOs.
- Piloting CWR to determine the effectiveness of training approaches and the acceptability and feasibility of the programme.

Success factors

The main success of the initiative has been the lessons learned and stakeholder perceptions documented from piloting of the CwR resource and its accompanying monitoring and evaluation package. Ministries of education in participating countries have expressed their interest and commitment to address SRGBV in their country's education systems. Both ministries and local teachers have shown their appreciation of the benefits that the CwR programme have brought to their schools and their students.

Overall, a decrease in all forms of students' experience of violence has been visible in participating countries. Students reported that they were more likely to seek help for themselves and others if they witness violence in schools, after CWR programme implementation.⁵¹

In addition, more than 330 teachers and educators have been trained on the CWR resource by UNESCO between 2018 and 2019 alone. The monitoring and evaluation efforts that are part of CwR also ensure effectiveness, while it is also strengthened by the cooperation of various UN agencies and continuous funding of the programme. While the country pilots have been modest in scale, the positive indications that have been documented highlight both the acceptability of the programme among teachers and students and the feasibility of applying curriculum approaches to forming and transforming gender-equitable norms.

Key factors for success:

- The CwR resource **links to existing policies** in Thailand and Viet Nam aimed at providing safe learning environments in order to create sustainable change.
- Practical and mixed teaching methods including participatory learning methods, and learning activities for students, teachers and relevant stakeholders to enable capacity-building.

⁵¹ Data from student survey as part of limited pilot testing of the monitoring and evaluation data collection tool for Connect with Respect Thailand.

- Lessons and activities are easily adaptable for non-formal education settings and community learning environments.
- **Continuous monitoring and evaluation** efforts to ensure tracking of the progress towards the goal of creating safer school environments for all learners.

Applicability

Connect with Respect is an openly accessible resource. It has so far been piloted in Thailand (by UNESCO), and in Timor Leste and Viet Nam (by UN Women), but teacher trainings have also been conducted in several other Asia-Pacific countries such as Fiji and Papua New Guinea. In addition, the CWR curriculum resource has been adapted for use in other regions, such as Eastern and Southern Africa. These experiences have shown that the content and approaches of the CwR programme are applicable to different country contexts despite potential implementation challenges such as classroom time allocation, school readiness, among others. The leadership of ministries of education, the active engagement of school management and teachers to support non-violent school environments, with systematic and regular monitoring and evaluation, are essential.

Linking the CwR programme to Comprehensive Sexuality Education (CSE) lessons in schools is another way to further enhance students' transversal competencies. The high level of adaptability of the CwR resource is especially important within this context, as the way CSE is delivered is highly dependent on sociocultural factors (UNGEI and UNESCO, 2019). Successful CwR teachers who have used the programme's learning resources and undergone capacity-building are available as a cohort of skilled resource persons for capacity building of their peers as coordinated by the Ministry of Education.

Sustainability

The sustainability of CwR is ensured by the schools and ministry of education staff members that have benefited from the accompanying training. To ensure that positive behaviour changes among students are promoted and sustained, UNESCO recommends embedding key CwR content and learning approaches throughout different school activities as a long term strategy, as well as implementing this content within the curriculum across school in order to apply a holistic approach to achieving Target 4.a.

Conclusion

Education can help to foster positive gender and social norms, including those that promote equality, respect, peace and social cohesion. A comprehensive school response to the prevention of SRGBV includes proactive policies and the provision of a classroom programme that promotes respectful relationships and social interaction skills among students. CwR programmes provide teachers with a curriculum resource covering important topics such as gender equality, human rights and non-violence and accompanying teacher training to reduce violence and enhance gender-sensitivity in schools. These CWR learning activities can be adapted to non-formal education settings and contribute to making education facilities of all kinds – safe, non-violent, and inclusive – while also ensuring that they serve as effective learning environments for all learners.

9 Implementing Girls' Right to Education through the Malala Funds-in-Trust

in Pakistan

Girls Education

- Girl's Right to Education in Pakistan
- Supported by UNESCO and the Malala Funds-in-Trust
- Active in 18 of Pakistan's most marginalized districts
- Improving girls' access, retention and quality of primary education
- Strengthening government capacity
- Mobilizing communities
- Improving schools' physical and learning environments

Summary

Since 2015, UNESCO's flagship Girls' Right to Education Programme (GREP) has supported the Government of Pakistan in improving girls' access, retention and quality of primary education (UNESCO Islamabad, 2017; 2018; 2020). GREP is active in 18 of Pakistan's most marginalized districts. The three programme components include the strengthening of government capacity, the mobilization of communities and the improvement of schools' physical and learning environments. To this end, additional funds have been secured, which allow the programme to run until the end of 2020.

Implementing SDG 4

- Target 4.1: Free, equitable and quality primary and secondary education
- Target 4.5: Elimination of gender disparities and equal access to all levels of education
- Target 4.a: Gender-sensitive, safe, non-violent, inclusive and effective school environments
- Target 4.c: International cooperation for teacher training and improved teacher quality

Context

Pakistan's access to education and retention in education remains low. The country's enrolment and completion rates for primary education are among the lowest in the world. A total of 22.84 million children are still out of school, while only 35 per cent of children in primary schools continue their education after Grade 7 (UNESCO, 2020b). After the primary level, enrolment rates drop drastically for girls, and regional disparities such as rural and urban displacements, as well as cultural stereotypes towards girls' education, further exacerbate the situation. Other challenges include the often below-average socio-economic status of parents, availability of and distance to schools, as well as health and hygiene conditions in schools.

GREP tries to increase girls' access to primary and secondary education (Targets 4.1 and 4.5), to decrease drop-out rates and to improve the quality of girls' education. At the same time, the programme aims to improve educational facilities, including their infrastructure (Target 4.a) and the capacity of teachers (Target 4.c).

Malala's Funds-in-Trust for Pakistan's Girls' Right to Education Programme (GREP)

The core objective of the programme is to increase access, retention and quality education for girls in Pakistan (UNESCO Islamabad, 2019). Between 1 July 2015 and 31 December 2020, 18 of Pakistan's most underprivileged districts are participating in the programme with the support of UNESCO and the Malala Funds-in-Trust. The programme's implementing partners include the Ministry of Federal Education and Professional Training, the provincial Education Departments and other local partners. The Government of Pakistan, through its Malala Funds-in-Trust, provided US\$7 million in 2015 in order to cover 304 girls' primary schools in 13 districts. The budget increased to US\$20 million with the support of additional funding from other development partners, increasing the number to 1,120 schools in 19 districts (UNESCO, 2020c).

The GREP programme has three key components (strengthening government capacity, mobilizing communities and improving schools' physical and learning environments), which are being targeted through interventions at institutional and community levels:

Key activities

- Focus on Activity-Based Learning (ABL) and Multi-Grade Teaching (MGT)
- Integration of local history, art and culture into the teaching and learning process
- On-the-job teacher training
- Provision of teaching, learning and recreational materials to schools
- Providing missing school facilities such as washrooms, boundary walls⁵² and shelter
- Capacity-building of school management committees
- Building alliances and networks with local partners
- Advocacy and mobilization campaigns
- Customized training programmes and workshops for education officials

⁵² A boundary wall is a protective structure around the school grounds intended to protect learners in vulnerable locations, for instance where there may be a threat of attack.

Success factors

The programme, which was initially targeted at 40,000 Out of Primary School Girls in 304 schools, was successfully expanded in 2019 to a target of 58,000 girls out of school in 1,120 schools. Significant results of the programme include its inclusion into provincial policies and education sector plans. Local communities and School Management Committees (SMCs) have created a more enabling environment for girls' education, and numbers show that girls' access to education facilities is improving in Pakistan's marginalized areas that participated in the programme (UNESCO, 2019a). Overall, 20 Non-Formal Basic Education Centres (NFBE) have been formed, with ten more set to be established in 2020.

Key factors for success

- Increasing girls' enrolment in primary schools in marginalized and vulnerable areas by mobilizing local communities.
- Partnership with strategic stakeholders at the grassroots level, such as religious leaders, community influential and tribal heads etc.
- Improving schools' physical and learning environments and teacher quality to improve retention and enhance the quality of girls' primary education.
- Building the capacity of relevant education stakeholders to create an enabling school environment.
- Adapting to the local context to work with each community, according to their needs, by cooperating with grassroots stakeholders to ensure sustainability of the programme.
- Attracting donors' attention to help with geographical expansion and enhanced outreach.

Applicability

The strategies employed in this programme can also be used in remote and rural communities in other countries. By including community leaders and focusing on participation and community mobilization, this programme can be adapted to local sociocultural factors.

'Including community leaders and government officials allow the programme to adapt to local sociocultural factors and to be sustainable in the long-term.'

At the same time, the programme has encountered some challenges. While SMCs have been formed, there is also a need for continuous support to ensure their active participation for improvement. Training teachers and providing them with support, however, has made capacity-

Including community leaders and government officials allow the programme to adapt to local sociocultural factors and to be sustainable in the long-term. building possible. The programme showed that it is especially important to train more than one teacher in each school to ensure both Multi-Grade Teaching and Activity-Based Learning, as well as ensuring that the transition from primary to lower secondary education is facilitated carefully and patiently.

Sustainability

Additional financial resources have helped to guarantee this programme's sustainability over time, as well as its geographical expansion in Pakistan. The mobilization of funds shows that the multi-stakeholder effort to support the government has been successful. Also, the support of stakeholders such as the Korean International Cooperation Agency, the Italian Agency for Development Cooperation, the Educate a Child Programme of the Qatar Foundation, and the Norwegian Ministry of Foreign Affairs, has helped to distribute tasks by having each partner focus on one province, area or target.

This programme is also in line with Pakistan's current national reform agenda and the priorities laid out in its Education Sector Plan, which provides its sustainability at policy-level. Focusing on a participatory and demand-driven approach in the GREP programme has also created a strong sense of ownership both for communities and the government, which indicates that its results will be long-lasting.

Conclusion

The GREP shows that strong government and community involvement can also result in strong government and community ownership. This dual approach, in terms of support, participation and buy-in, further supports both the quality and the sustainability of such a programme. In addition, the GREP shows the importance of contextualization when working on implementing the SDG 4 targets, showing how programmes adapted to each district and community can lead to particularly good results. Its approach of context-based learning and community feedback, in particular, not only allows for continuous improvement of the programme, but also for behavioural change in community perception about girls' education.

10 Enabling Lifelong Technical and Vocational Education and Training:

the Republic of Korea's Innovation Plan

TVET and Lifelong Learning

- National Innovation Plan to support lifelong technical and vocation education and training
- Ambition to prepare the Republic of Korea for its economic future
- Cooperation among various ministries and other stakeholders such as schools, the private sector and industry
- Enhancing the quality of TVET at higher education level
- Reinforcing the link between lower and TVET in upper secondary level education
- Strengthening the role of technical and vocational education as a lifelong learning institution

Summary

In the last five years, the Republic of Korea's ministries of education and of employment have worked in collaboration to improve the country's TVET. The resulting national TVET Innovation Plan includes measures to improve the participation of students and adult learners, to build capacity of teachers and to equip learning institutions and colleges with the necessary infrastructure and financial support. The Plan also places a focus on connecting educational institutions with local governments, industries and other related organizations in order to facilitate access to TVET training and relevant jobs.

Implementing SDG 4

- Target 4.3: Equal access to affordable, high-quality TVET and tertiary education
- Target 4.4: Increased number of youth and adults with technical and vocational skills

Context

As is the case in many countries, in the Republic of Korea expected changes in society implies a need for an adapted approach to TVET. This will allow people to diversify their skills and tackle job uncertainty at any point in their life. The Republic of Korea is looking to establish a flexible and integrated TVET system via its national TVET Innovation Plan (Republic of Korea, 2018), which is designed to prepare the future workforce based on skills and competencies needed to meet the needs of the labour market.

The Plan intends to foster innovative talents among a future workforce that can lead to economic growth. The increased demand for skilled workers, the low birth rate, ageing population, and changes in population structure have resulted in a decrease in the productive population, highlighting the importance of TVET as an option accessible to people of all ages.

TVET in the Republic of Korea: Innovation Plan for Lifelong Vocational Education and Training

The core objective of the TVET Innovation Plan is to prevent inequality and lack of social mobility by building a job safety net through expanded and targeted opportunities throughout the Republic of Korea. By targeting students and adult learners as well as schools, teachers and colleges in the country, the Education Department intends to enhance the quality of TVET (Target 4.3), strengthen its role as a lifelong learning opportunity and provide an innovative response to shaping the future of society (Target 4.4).

Several ministries of the Republic of Korea have cooperated in this plan (referred to as Joint Ministries), which is being implemented at national level. To achieve its goals with regard to TVET, the country is also expanding its financial support to upper secondary TVET schools and institutions, as well as establishing scholarships for training students on the job.

Key activities

- Curriculum innovation that focuses on industry and labour market needs
- Strengthening teacher competencies for improved TVET quality
- Strengthening the link between upper secondary and tertiary levels
- Introducing vocational high school and tertiary technical colleges
- Improving regulations that strengthen vocational education management
- Introducing a new model for vocational education at tertiary level
- Expanding financial support for vocational education innovation
- Establishing an efficient vocational education support system to strengthen cooperation between ministries, colleges, Small and Medium Enterprises, and other stakeholders

Success factors

The Republic of Korea's TVET Innovation Plan has had a significant impact on the country's Vocational Education and Training Policy. A renewed focus on preparing for the economy of tomorrow, on skills development (Target 4.4) and on more inclusive vocational education (Target 4.3) in combination with government funds released demonstrates widespread support for the plan.

It appears that strong cooperation and coordination among the Joint Ministries, as well as additional stakeholders from relevant sectors, helps to make the TVET Innovation Plan sustainable in the long-term. Political support for the plan, as well as its alignment with SDG 4, showcases the synergy between education and economic future proofing.

Key factors for success:

- Strong cooperation among ministries to efficiently implement TVET at all levels
- Involvement of private companies to ensure access to the labour market
- Provision of TVET according to labour market demand and supply
- Focusing on economic growth to future proof the country through skilled workers
- Providing fair and equal access to allow for a more inclusive TVET education
- Facilitating the transition between secondary education and TVET

Applicability

The Republic of Korea's TVET Plan is designed within the context of an ageing population that requires investment in continuing education throughout life. While the technological advances and the socio-economic status of the country may not resemble that of countries in other development stages, the core challenge of discrepancies between demand and supply of relevant skills are present in many countries. With a few adaptations to the local context, a TVET Plan could be applied to countries with different socio-economic and cultural environments as well. In less developed countries, for example, TVET can provide a sustainable alternative to higher education at the tertiary level. The focus that the Republic of Korea places on investing in people, and developing their skills as a force of innovative growth, is an important element with regard to TVET Innovation Plan's success.

New challenges posed by COVID-19 must also be taken into consideration with regard to TVET systems. While the Republic of Korea is already providing online learning resources and tools, these may not be easily available in other countries. In addition, the immediate and long-term effects of the pandemic in terms of access to infrastructure, as well as teacher training and student support, remains to be seen (ILO, 2020b).

A focus on investing in people as a force for innovative growth, and on developing relevant skills, is a crucial element of the TVET Innovation Plan's success.

Sustainability

The sustained and increasing government investments, as well as support from the Ministry of Education, Ministry of Industry, Ministry of Employment, and Ministry of Mid-term Industry, all show that the TVET Innovation Plan is well anchored within and supported by the Republic of Korea at policy level. The plan also favours colleges, companies, and the overall economic growth of the country on top of enhancing learners' skills, meaning that it interacts with many facets of sustainability and economic progress. Other policy reforms including college innovation (Republic of Korea, 2019) and TVET innovation also imply that the measures set out in the TVET Innovation Plan will be sustained.

Conclusion

The Republic of Korea is tackling its future socio-economic challenges with its TVET Innovation Plan, which is supported by various ministries and government funding. By facilitating access to TVET and improving the quality of TVET systems, the country is working towards Targets 4.3 and 4.4. While COVID-19 might post further challenges in the plan's ambitions, the focus on people as a force for the country's innovative growth forms a crucial part of the country's educational policy.



11 Inclusive TVET for People with Disabilities:

the Vanuatu Skills Partnership

Disability and Inclusion

- National Disability Inclusion Policy for the Technical and Vocational Education and Training (TVET) Sector 2016–2020 in Vanuatu
- A disability-inclusive approach to TVET
- Cooperation between the Ministry of Education and Training and post-school education and training providers
- Increased numbers of people with disabilities participating in skills development opportunities across Vanuatu

Summary

Vanuatu's Ministry of Education and Training has developed the National Disability Inclusion Policy for the TVET Sector 2016–2020 (Republic of Vanuatu, 2018a). In order to implement this policy, the Ministry of Education, as well as education and training providers in the country cooperated with the Vanuatu Skills Partnership. Based on the Australian Government's Department of Foreign Affairs and Trade's (DFAT) (Australian Government, Nd.) Development for All Strategy, the Skills Partnership intends to mainstream approaches to inclusive education and to promote disability specific activities for equitable access.

Implementing SDG 4

- Target 4.3: Ensure equal access to quality TVET
- Target 4.4: Increase the number of youth and adults with relevant skills
- Target 4.5: Ensure equal access to all levels of education for people with disabilities

Context

Like other Pacific islands, Vanuatu has strengthened its commitments to tackle barriers faced by people with disabilities, especially with regard to accessing education. However, there is still a need for more and better allocation of public resources for the inclusion of people with disabilities. The proportion of the national budget for programmes for persons with disabilities currently lies below 0.15 per cent of Vanuatu's GDP. This means that disabled persons rely strongly on official development assistance for disability-specific and disability-inclusive services.

Vanuatu's Skills Partnership intends to adopt a holistic approach to inclusion, through a whole-government approach. In the long-term, adequate regulatory changes and a clearer allocation of responsibilities for TVET, but also for other aspects of life, remain its key objective.

The National Disability Inclusion Policy for the Technical and Vocational Education and Training (TVET) Sector 2016–2020

At the heart of the Vanuatu Skills Partnership is the implementation of the National Disability Inclusion Policy for the TVET sector. In addition to this policy, the National Disability Inclusive Development Policy (Republic of Vanuatu, 2018b) is also key for guiding these efforts. Funding for the Partnership comes from the governments of Australia and Vanuatu and from a 3-year-grant through DFAT's Disability Inclusive Development Fund.

In order to develop and implement disability inclusion action plans, the Ministry of Education and Training, the Vanuatu Qualification Authority, the Ministry of Justice and Community Services, and the Vanuatu Disability Promotion and Advocacy Association work together. The action plans intend to promote disability inclusion within post-school education and training options as well as to support mainstreaming of the rights of persons with disabilities in all policies, plans and programmes across the education and training sector. Overall, the activities of the Skills Partnership contribute to a sustainable and well-coordinated skills system that can maximize access to relevant and high-quality qualifications, leading to improved economic, social and cultural development opportunities for all of Vanuatu.

Promoting disability inclusion within the TVET sector and the rights of disabled people is crucial to meeting Targets 4.3, 4.4 and 4.5.

Key activities:

- Awareness-raising to promote opportunities for people with disabilities
- Improved accessibility to TVET
- Provision of fundamental support such as transport, accessible venues, sign language interpreters, and caregivers
- Simplified enrolment procedures for people with disabilities
- Data collection on disabilities and TVET

Success factors

Since 2016, Vanuatu's Skills Partnership has managed to reach less visible people with disabilities, especially those who are deaf and hard-of-hearing. Another success has been the establishment of Disability Inclusion Officers in provincial governments. The Disability Inclusion Narrative Report July–December 2019 (Republic of Vanuatu, 2019) shows that the number of people with disabilities achieving formal qualifications has since increased.

The partnership's various provincial skill centres have delivered a total of 19 different disability inclusive skills in the agribusiness, infrastructure, creative industry and tourism sectors. This has led to 4 per cent of participants consisting of people with disabilities. The activities have also been monitored by training providers, who reported improvements in the accessibility of premises, capacity of trainers, community awareness-raising, disability inclusion policies and in the enrolment and achievements of TVET students with disabilities.

Key factors for success:

- Partnership between government, training providers and the industry to guarantee integration of TVET graduates into the workforce.
- Cross-sector collaboration to implement inclusive training for different students.
- Focus on diversity of skills to cover various markets.
- Public and private resource allocation to guarantee long-term financial stability.

Applicability

Vanuatu's economy is heavily dependent on tourism. Cultural heritage is also a central part of community identity and social cohesion, that is linked to tourism through the production and sale of local handicrafts. However, improvements in inclusive TVET do not exclusively rely on Vanuatu's socio-economic and sociocultural attributes. Other countries can apply lessons from the Vanuatu Skills Partnership, such as the focus on diversity of skills and the cross-sector collaboration and adapt them to local conditions.

A potential challenge for the partnership is that DFAT funding is coming to an end in 2020 and disbursements of grants from other partners may take a substantial amount of time to come through. In addition, the low supply of staff at external training providers pose a threat to further progress in inclusive TVET. By incorporating key elements of the National Disability Inclusion Policy for the TVET sector into government policies and financing mechanisms, these challenges could potentially be turned into opportunities.

Sustainability

Reforms within Vanuatu's education sector, such as the appointment of a Disability Inclusion Officer, will enable the continued provision of support to TVET training providers (Targets 4.3 and 4.4). In addition, a Disability Inclusion Coordinator for the Language, Literacy and Numeracy Group has also been appointed to work collaboratively with other officers towards the participation of disabled people in TVET and skills development, thus working towards meeting Targets 4.3 and 4.5.

Conclusion

Vanuatu's inclusive TVET Policy as well as the Skills Partnership is an example of disability inclusion within a mainstream economic empowerment programme. By cooperating with international and as national partners on several levels, these efforts can be sustained in the long-term. While sustainable sources of funding provides a challenge, successes from 2016–2020 show that the partnership has already contributed to important changes towards Targets 4.3, 4.4 and 4.5 in Vanuatu.



COVID-19 AND EDUCATION

THE COVID-19 PANDEMIC has already had, and will continue to have, far-reaching consequences for the world as a whole, including for education (United Nations, 2020). In terms of achieving the SDG 4 targets, the impact will likely be especially devastating. It will make their achievement by 2030 more difficult, and reverse much of the progress made in education since 2015 (UNESCO, 2020a). In terms of enrolment and completion rates, the quality of education provided and the knowledge and skills gained, as well as the reduction of educational disparities as stipulated in SDG 4, might even set the education sector back several decades in the Asia-Pacific region (Ibid).

The immediate impact of COVID-19 on education was widespread school closures worldwide. These closures ranged from only a few months in the case of Japan and Timor-Leste, to over a year (and still ongoing as of early 2021) in the Philippines and Bangladesh. However, even in countries were schools were closed for only a few months, the impact on learning is likely to be hugely significant. Evidence from a study conducted after the Pakistan earthquake in 2005, showed that four years after schools had been closed for 3 months, those children who were directly affected by the closures were 1.5 years behind in learning outcomes (Andrabi et al., 2020). The World Bank estimates that globally, COVID-19 could result in a loss of between 0.3 years and 0.9 years of quality schooling, and that a school shutdown of five months would generate learning losses that have a present value of \$10 trillion (World Bank, 2020e). A study of post-COVID-19 lockdown learning outcomes in the Netherlands confirms the worst fears of significant and uneven learning losses, with students from less-educated homes suffering learning losses 60 per cent higher than those of their peers (Engzell et al., 2021).

Responses to provide continuity of learning have been met with significant challenges including large digital divides and teachers lacking adequate resources and digital literacy. Governments often lacked the data they needed to identify and target the different marginalized groups. However there have been many examples of positive responses to these challenges, including worksheets being distributed with mid-day meals in India, edutainment broadcasts in Lao PDR, rapid curriculum reform in Bhutan, and blended digital and non-digital learning for children with disabilities in Viet Nam.

As highlighted in the situation analysis by UNESCO and UNICEF (forthcoming), the unprecedented interruption to learning due to COIVD-19 does provide a unique opportunity for change and building back better. One of the keys is to invest in the capacity of teachers to work in partnership with communities and parents to provide alternative and more flexible learning solutions for all children. A new approach to learning should encourage differentiation in terms of pedagogy, and more autonomous learning with a focus on skills and conceptual understanding. This should extend to the full range of life skills required. Lack of differentiation in the classroom was a critical constraint to realizing inclusive education prior to the COVID-19 pandemic.

Teachers will now need additional support and training to provide adequate remediation, deliver different modalities of learning, and perform expanded counselling and health and safety roles – all while coordinating with parents, carers and the community. Box 6 outlines the post-COVID-19 teacher training needs in greater detail. All countries will need to significantly increase the level of funding for basic education. COVID-19 presents a new kind of humanitarian disaster, which unless fully addressed, could undo decades of investment and especially impact on girls' education. New partners and funding streams will also be critical to ensure that the learning loss due to COVID-19 is addressed, and to enable technology to play a critical role in equitably expanding access to alternative learning pathways going forward.

Teacher Capacity Development to Respond to the COVID-19 Pandemic.

The following list outlines **teacher training needs** in chronological order, starting from those that support planning efforts to reopen, those that should be implemented during the reopening phases, and those that need to be organized as a longer-term capacity development plan.

Before reopening, especially in countries that have been strongly affected by the pandemic with schools closed over a long period, the following list of recommended actions for teachers is recommended:

1. Consultation and agreement on the management of school reopening

- Involve teachers and unions in decision-making.
- Agree on a prioritized sequence of trainings with education authorities, and relevant stakeholders.
- Design and roll out trainings on health, mental health and psychosocial support, infection prevention and control, water sanitation and hygiene Standard Operating Procedures in schools
 - Include what teachers, school staff and learners need to know about COVID-19.
 - Implement Standard Operating
 Procedures in schools on school hygiene,
 handwashing, and any measures related to social distancing.
 - Detect mental health and psychosocial support needs and cases as well as referral mechanisms.
 - Address misinformation, stigmatization and discrimination.

Changes in the organization of teaching and learning

- Revise school calendar and exam schedules.
- Revise the syllabus and curriculum focused on key learning outcomes.
- Ensure organizational changes including staggered start, shifts and groupings.
- Identify alternative and relevant learning modalities where teachers are serving to ensure trainings are adapted to the local context.

4. Inclusion

- Identify and support integration of previously out-of-school children.
- Ensure that alternative teaching and learning modalities that are put in place in response to the pandemic are accessible to children with disabilities, children of minority ethnic languages and any other disadvantaged student population.

During reopening, the focus should be on safety first, and preparing teachers for the shift in pedagogies to compensate for learning loss and catching up:

- Focus on Infection Prevention Control and WaSH, including monitoring and reporting health of students.
- 2. Conduct teacher health risk assessments.
- Support teachers in their communication with parents and communities, encouraging all children to exercise their right to come to school.
- 4. Support teachers in conducting **initial diagnostic assessments**: analysis of results and learning gaps with a focus on foundational skills at primary level, linked to age-related behaviour and cognitive capacity.
- 5. Support teachers to develop remediation strategies based on assessment results.

 Provide training on specific support to girls, children with disabilities, linguistic minorities, children of migrants, refugees or internally displaced children, as locally relevant.

After schools have reopened and safety protocols in schools are well standardized, the priority for capacity development will shift to longer-term training needs in order to mitigate long-term learning loss and increase learning outcomes as the overall key objective:

- Scale-up teacher training in **blended learning** and prepare for potential re-closures.
- 2. Conduct continuous assessment, monitoring of learning outcomes, while **adapting remedial teaching strategies**.
- Develop teacher capacity on digital skills, online teaching and learning approaches, to leverage the potential of **technology** for learning.
- 4. Support **alternative parallel learning systems** for out-of-school children and future disruptions, choosing an alternative model that is relevant to the context and

- based on the modality that can reach a maximum number of children at the teaching location.
- 5. Support the development of **peer-to-peer support mechanisms** by identifying teacher mentors, site moderators and content reviewers so that all teachers can access relevant and contextual support, and content from experts within their own profession.

 This includes lesson plans with activities to engage children, teaching materials to sample test questions, online teacher support and exchange platforms that can increase the immediate applicability of trainings.

 This will also increase the chances of these mechanisms translating into actual changes in teaching practices in the classroom whether physical or virtual.
- 6. Training of teachers in **self-care**.
- Advice and solutions for learners with special needs to ensure that learning materials and platforms are accessible for **children** with disabilities, and translated into local languages and dialects.



POLICY RECOMMENDATIONS

DESPITE THE MANY CHALLENGES faced in achieving SDG 4 in the Asia-Pacific region over the last five years, and the unprecedented disruption caused by the COVID-19 pandemic in 2020 and beyond, accelerating progress towards by 2030 is still possible. This final chapter of the 5-year progress review report reflects on key existing opportunities

for SDG 4 and then presents a set of **key policy recommendations** for education stakeholders in the region. The chapter ends with a call for action to reimagine education. In Annex 2 more specific recommendations and priorities for actions are presented for each of the **SDG 4 targets**, and for each of the **excluded groups**.

Opportunities for SDG 4

Given the urgency of achieving SDG 4 by 2030, it is crucial that countries maximize opportunities that can facilitate progress, particularly based on existing national policies and strategies that can address barriers to equity and inclusion. These could be grouped in five main areas: legislation, affirmative actions, advocacy, equity-based funding mechanisms and progressive universalism.

Legislation

Many countries have **legislation in support of inclusion and equity**, which guarantee universal, free and compulsory education as well as inclusive education systems and schools. While they are honoured and observed, their implementation may be lacking. It is essential that countries refer to these declarations and constitutional mandates in education planning and programmes and extend those mandates if they do not yet cover pre-primary education.

Affirmative Actions

Inclusive **policies and affirmative actions** towards inclusive education can be identified in some countries, focusing on a broad range of excluded groups. These may include a general policy and specific strategies, actions, timetable and budget estimates. It is essential that such policies include actions focused on multiple factors for exclusion, as well as

flexible learning options. For instance, as the whole world addresses recovery needs of the pandemic, distance and online learning modalities are emerging as a global priority to reach every child with quality education opportunities. Such options could potentially resolve the challenge of reaching all children with face-to-face learning, multiply accessibility of education in minority languages, adapted contents and delivery modes for children with disabilities, children on the move, children engaged in labour and other out-of-school populations. While it is critical to mitigate the risk of increasing the digital divide, political commitment to support affirmative actions can facilitate the scaling-up of flexible and online learning, which could potentially become the great social equalizer for the future of education.

Advocacy

Advocacy campaigns help to raise-awareness and provide a strategic opportunity to bring about change, while also addressing specific barriers and challenges. Campaigns such as Global Education Week, the use of special ambassadors, or celebrations to commemorate landmark conventions or international days, as well as networking groups, all present opportunities to generate support. Targeted advocacy efforts towards and through regional or sub-regional institutions and agencies

(for instance ASEAN, SPC, SAARC, ESCAP etc.) could mobilize decision-makers and supporters at national, regional and even international levels. It could also ensure that issues around equity and inclusion in education remain on the political agenda (such as the ASEAN Declaration and Working Group to Strengthen Education for Out-of-School Children and Youth).

Equity-based Funding Mechanisms

The use of **equity-based funding mechanisms** and the use of equity indices for targeting those that are most vulnerable and marginalized can help to combat exclusion with targeted investment and actions. This ensures that the national education budget is utilized through a transparent and equity-based formula, whereby funds are allocated with a view to support under-resourced areas. It is also critical to promote decentralized accountability and provide comprehensive school support for local actions and solutions.

Progressive Universalism

Progressive universalism is another strategy that can help ensure that public investments are channelled to the earliest levels of education first, for instance early

childhood, before moving onto higher years. As the country progresses towards universal completion of lower education cycles, investments then move up to higher cycles. As most Asia-Pacific economies were badly affected by the COVID-19 pandemic and lockdowns, domestic revenues will decrease, inevitably affecting countries' ability to invest in social sector development such as education in the coming years. Furthermore, the education sector needs additional investments compared to previous years in order to ensure response and recovery, to implement measures for social distancing (for instance shifts, which require more teachers and facilitators), infrastructure development in schools (WaSH, electricity and connectivity) and to rebuild a more resilient education system overall. Despite the cost to countries, including for those which will have to consider taking out additional loans, increasing funding for education is necessary to fund fast-paced reforms of school systems. Rollingout WaSH facilities in school infrastructure development is the first priority to make all schools safer for children, while also leveraging the potential of technology for learning as the key for the future of education.



Recommendations for Accelerating Progress Towards the SDG 4 Targets

Given the range of contexts and challenges that have been further complicated by COVID-19 in relation to the achievement of SDG 4 in the Asia-Pacific region, an exhaustive and prescriptive list of recommendations is not appropriate. A broad review of progress in relation to SDG 4 lends itself to an equally broad set of recommendations, framed as policy options which decision-makers can select from depending on their own specific context and challenges. While translating recommendations into action can involve difficult choices and trade-offs, it is important that principles of equity and inclusion are applied given our collective commitments to the SDGs. Not only is equity at the heart of the SDG agenda, it can also lead to the most efficient use of limited resources. For example, one additional teacher will have a much bigger impact in a school facing teacher shortages than in one with a teacher surplus. The following recommendations have therefore been drawn. and are consistent with those of the Sixth Asia-Pacific Forum on Sustainable Development.

1. Build education systems that embrace relevance and flexibility, and have equity and learning at their core.

The relatively slow progress in the region in reaching the SDG 4 targets and the generational shock of COVID-19 calls us to reflect upon the intentions of education and the meaning of an educational system. Education must capitalize on the possibilities provided by new digital technologies, but it must do so in an effective, progressive and equitable manner, so that all are included and learning. Multiple pathways

and flexible modalities of learning will need to be developed to allow all to engage in lifelong learning beyond a physical classroom. Digital technologies have the potential to reach the unreached. They allow learning to take place anywhere and anytime throughout learners' lives, and provide greater flexibility in validation and certification, with learners able to access courses from around the world. However, it is not just the modalities of learning that must change, but also the nature of the learning itself.

Learning must mean providing all learners with 21st century skills and the transferable competencies necessary to prosper in, and shape a world of greater environmental and economic uncertainty. Curricula will need to be competency-based, and mainstream wide-ranging issues from climate change, risk mitigation and social cohesion, to peacebuilding, inclusion and digital skills. Education systems themselves must also change, becoming more flexible and therefore more resilient to external shocks. This means that the linear model where one education level leads directly to the next, and the notion of hierarchies acting as filters to produce an elite while failing the majority, will have to be replaced by a dynamic network of more inclusive interconnected pathways and learning hubs.

2. Remove barriers that hinder equity, inclusion and quality in education

Far too many children, youth and adults from excluded groups in the Asia-Pacific such as persons living with disabilities, those with low socio-economic status, linguistic and ethnic minorities, are being denied their right to a quality education. The barriers to education they face range from legal, to policy, to infrastructure, as well as sociocultural, and they must be removed. These barriers present the principal obstacle to the fulfilment of SDG 4 and the vision of Education 2030. Some barriers may be expensive, such as the provision of feefree education, while others may only be fully achieved in the longer term such as changing attitudes towards persons with disabilities.

A rights-based approach to the progressive realization of opportunities can be employed leading to the full realization of education rights for all learners. For example, fee-free education can be introduced progressively by targeting those with the most limited means first, or by prioritizing the levels of education that benefit the most marginalized such as early childhood education. The extent of exclusion and the number of people affected are likely to grow due to the impact of COVID-19 on extreme poverty levels, internal migration, and climate and conflict affected refugees. This will require additional and complementary social protective system level changes, as well as measures including health and nutrition interventions in schools such as school feeding in order to address them.

3. Ensure an adequate and equitable supply of motivated, supported, qualified, resourced and empowered. teachers.

The COVID-19 pandemic has emphasized the crucial and multi-faceted role teachers play in the lives of their students and in the functioning of our societies. It has also highlighted how many different roles are expected of teachers. They serve as educators, care givers, facilitators and counsellors, while expected to simultaneously mastering an array of different tools and modes of communication. Pre COVID-19, significant teacher training

reforms, including competency-based education with a stronger focus on skills building, digital education, and a more student-centred pedagogy, were already needed to address the learning crisis and the changing nature of education.

In response to COVID-19, teachers will need additional support to provide adequate remediation. This includes understanding the prioritized curricula as well as diagnosing and adapting to individual students' learning loss. They will have to be supported to provide continuity of learning including designing and delivering appropriate distance learning across a range of modalities. They will also have to be supported to play a greater counselling and communications role in detecting mental health issues, providing psychosocial support, and communicating with learners and their parents about safety and risk mitigation protocols.

Teachers need to be at the centre of all education reforms starting from the design phase, and they must be adequately supported and resourced to carry out their expected roles. As these roles change and the focus of curricula adapts, broadening modalities of learning and more diverse classrooms are vital so that teachers are provided with additional orientation, training and resources. It is also crucial that the available teaching force is equitably allocated and managed to ensure the most disadvantaged learners and levels of education are prioritized.

4. Increase and ensure the equitable supply of suitable infrastructure, physical and digital resources, from basic necessities to digital technologies.

Physical resources in schools, starting with the most basic necessities such as electricity and WASH facilities, must be improved. All learning locations should also facilitate the full participation of persons with disabilities in learning. The COVID-19 pandemic has shined a light on the great potential of digital technologies and remote learning. This is only likely to increase in future. This expansion should be carefully managed to ensure that learning is the focus of such technologies and that they are designed and used to reduce inequalities rather than increase them. COVID-19 has also highlighted a significant limitation of online learning. This is the wide digital divide that exists in the Asia-Pacific region – both in terms of students' schools and their home learning environments.

The risk of exacerbating already existing inequalities through digital learning must be pro-actively addressed. The implementation of future digital agendas in education will need to be underpinned by equity principles. This includes equity of reach and access, so that the promising education solutions of tomorrow are not only reserved for those who can afford them. The pandemic has also shown the ongoing importance of no-tech and low-tech resources and approaches in providing all learners with quality education. This requires adequate investment in the short term, otherwise a generation could be lost chasing aspirations that will only benefit future generations.

Strengthen monitoring and use of data on the levels of learning and the conditions for learning.

This review has highlighted widespread data gaps in relation to education in the Asia-Pacific, especially with regard to education of marginalized groups and learning outcomes. What little information exists suggests a widespread lack of learning, and a pressing need to measure learning more regularly and

effectively – starting at the classroom level with greater use of formative assessments. Effective remediation in response to the pre-COVID learning crisis and the subsequent negative impact on learning requires individual learning plans based on appropriate assessments of learners' current levels. The assessment systems must be fit for purpose, meaning that they should provide planners and decision-makers with regular, timely and real-time information that facilitates the targeting of schools and teachers for additional support. Assessment and wider data management systems must also ensure that no learners are invisible. This requires more comprehensive and better quality disaggregated data on the most marginalized groups, for instance by utilizing the Washington Group and UNICEF Module on Child Functioning for children with disabilities. The Education 2030 Framework for Action called on countries to establish appropriate intermediate benchmarks for the SDG indicators (for instance by 2020 and 2025), in order to address the accountability deficit associated with longer-term targets. SDG 4 benchmarks, especially for a reduced number of key indicators, could be set through a transparent technical process supported by strong political commitment. This would help renew emphasis on achieving SDG 4 and be a first step towards improving in-country monitoring and reporting capacity – a key prerequisite for the overall strengthening of education systems.

6. Increase investment in education and ensure efficient and equitable resource allocation, as well as accountability in expenditures, through a progressive universalism approach.

The need to increase investment in education was apparent before COVID-19, with the pandemic now significantly increasing the scale and urgency of investment required. The

global commitment to allocate at least 4–6 per cent of gross domestic product, or at least 15–20 per cent of total public expenditure, to education must be met. This is the minimum. In the short and medium term, difficult financial trade-offs will be faced, and priority should be given to those levels of education that benefit the most people and the most disadvantaged such as early childhood or vocational training. Progressive universalism can be a guiding principle of this investment, ensuring that public investments are channelled to the earliest levels of education first, for instance in early childhood which sees the highest public rates of return. As a country progresses towards universal completion of lower education levels, investments then move up to higher levels. Failing to invest now in education, through remedial classes, improved school facilities, teaching capacity and more, will only lead to increased costs and reduced social development and economic growth in the future.

7. Strengthen and broaden partnerships across all actors in education from parents and caregivers, to international organizations and the private sector

Effective partnerships have been at the core of all significant progress towards achieving SDG 4. However these partnerships should be broadened and deepened to include young people, civil society, academia, media and the private sector. The private sector has a crucial role and vested interest in improving levels of 21st century skills, not least those affecting employability and productivity. COVID-19 has highlighted the crucial role parents and care-givers have to play in education and supporting teachers. This should be built upon in the short and medium term, especially in nurturing the early years and in rural communities where social distancing applies and multiple shifts need to be run. The mixed modalities of education that are currently employed across the region depend on a wide range of actors, and illustrate the potentially complex landscape of education in the future. Investments must therefore be made in establishing and coordinating effective partnerships as the region seeks to recover from COVID-19. Such investments, if made now, have the potential to lead to greater efficiency and cost-saving in the future as a wider spectrum of actors bring their expertise and resources to the achievement of SDG 4.

Recommendations by SDG 4 Targets

Specific recommendations are presented for each of the 10 SDG 4 Targets as well as the identified Excluded Groups

Target 4.1: Primary and Secondary Education

• Ensure that children from excluded groups are identified through enhanced monitoring systems by collecting, processing, analysing and utilizing data. Strengthen **EMIS** which collect register-based **individual data** on students and teachers to ensure a sufficient degree of disaggregation (such as age, gender or disability status). Link such administrative data to other data from national **surveys** by working with National Statistical Offices which collect information on socio-economic status. In response to

the COVID-19 pandemic, there is also a need for strengthening **real-time** monitoring systems, in particular for attendance and absenteeism, as all affected Governments will require regular and systematic data to track dropouts.

- Provide **tailored support** to the most disadvantaged children and adolescents based on data and evidence to increase enrolment, retention, completion and transition to further education (for instance through cash transfers, school meals, scholarships, mother tongue-based multilingual education, disability-inclusive education).
- Design and provide relevant flexible and alternative learning pathways as well as
 equivalency programmes between formal and non-formal vocational training options,
 with micro-certification of specific skills and learning outcomes, especially targeting
 vulnerable adolescents and youth.
- **Abolish tuition fees for secondary education**, combined with provision of additional targeted, inclusive and gender-responsive interventions to ensure retention and completion of disadvantaged adolescents (through cash transfers, teaching and learning materials etc.).
- Mobilize wider political commitment to and investment in education equity and inclusion, through regional cooperation mechanisms and initiatives (such as the ASEAN Declaration and Working Group on Strengthening Education for Out-of-School Children and Youth, Pacific Regional Education Framework).
- Strengthen national capacity and ensure mechanisms for monitoring and measuring learning progress and outcomes, as well as utilizing results to **improve teaching and learning** by participating in and learning from **regional and international large-scale assessments** and expertise (such as the SEA-PLM 2023, PILNA and PISA-D assessments). In response to the COVID-19 pandemic, there is also an immediate need to measure learning outcomes more regularly and for all grades in order to measure learning loss and remediate its impact. This calls for further development of systems to capture regular classroom-based continuous formative assessment results.
- Mainstream development strategies for providing better access to internet for all children and better access to **technology for learning** through multiple global initiatives with an equity lens, ensuring that the manner in which such initiatives are implemented at scale does not further widen the digital divide.

Target 4.2: Early Childhood and Pre-primary Education

- Commit to providing at least one year of **free and compulsory pre-primary education** with sufficient funding and legislation (10 per cent of the education budget should be invested in the pre-primary sub-sector, and additional support such as cash transfers could be provided to poor families).
- Design and implement quality home- or community-based early childhood education programmes, particularly in poor communities (especially in remote rural areas and urban informal settlements). This is even more important in response to the COVID-19 pandemic, since pre-primary schools in many Asia-Pacific countries are often the last grades to reopen. It is therefore essential to be able to reach all parents regularly, especially from disadvantaged backgrounds, with guidance packages for early stimulation, play activities and continuity of learning.
- Protect **budget allocation** for the early childhood and pre-primary education sub-sector within the overall education budget and maintain early education as a priority, especially in Lower Income Countries and Lower Middle Income Countries. Expenditure aimed at increasing access and quality at pre-primary level offer the highest return on investment, and can even sometimes 'pay for themselves' because of efficiency gains resulting from better school preparedness of children. It also increases learning outcomes and decreases dropouts and repetition at primary level.

Target 4.3: Technical, Vocational, Tertiary and Adult Education

- Provide scholarships, income contingency loans and other innovative financing schemes to increase the **affordability of higher education** and ensure access and participation of students most disadvantaged socio-economic environments.
- Promote equal and flexible access to quality **online and blended learning** through tertiary education, particularly for the most disadvantaged such as boys and those in remote rural areas. This could be achieved through shorter-term secondary education options and online courses to reduce costs (compared to on-campus education), as well as through more flexible learning options (so that students can complement their education while working, completing courses in their own time), and equivalences between programmes.
- Promote and encourage **private sector engagement** and partnerships for improving relevance of TVET and higher education programmes for better skilling and employability among vulnerable youths. This could be done, for example, through standardizing apprenticeships and practical on-site training opportunities for students running in parallel to their classes.
- Overcome **gaps in reporting** by investing in data collection for formal and non-formal education, as well as objective measures of affordability of higher education, including return on investment.

Target 4.4: Skills for Work

- Ensure that **basic digital literacy and ICT skills** are part of the curriculum, especially in low-income countries, and that they support girls and women.
- Design and provide affordable and flexible opportunities for training and learning for adults, especially in lower-income countries, to equip youth and adults with necessary knowledge, skills and competencies for decent life and work.
- Strengthen links between vocational training programmes and the labour market to clarify demand and supply of skilled youth who meet the demands of the **21st century labour market**.

Target 4.5: Equity and Inclusion

- Establish the **legal framework** for equitable education such as equitable education **laws**, **acts or decrees**, as well as an **education budget** that is clearly linked to the legal framework.
- Invest in national statistical systems and in building institutional capacity development
 in expanded data collection, processing and analysis mechanisms, with disaggregated
 data by age, gender, disability status, wealth, location, to better understand disparities
 in education and inform policy responses through evidence-based and data-informed
 planning and budgeting. This can be done through the following measures:
 - Develop data policies
 - Shift to a register-based EMIS with individual student data
 - Utilize household surveys and other data sources (including real-time)
- Conduct an equity-focused Education Sector Analysis and develop solid Education Sector Plans (including clear target setting, regular sector reviews linked to budgeting, monitoring and evaluation).
- In response to the COVID-19 pandemic, it is essential to design **monitoring systems** and steering mechanisms which ensure that regularly updated information, processed and presented in a format that can be easily understood and used by local level decision-makers, is regularly being produced for situation and implementation monitoring. As responses to the pandemic require **regular**, flexible and constant adaptation, this is a crucial recommendation for the short term.
- Secure and dedicate a proportion of equity-based education budgets to allocate funds
 to excluded groups, adult education, as well as non-formal and informal education
 programmes to reach the most disadvantaged, by developing and implementing
 formula-based financing mechanisms that is linked to appropriate data and indicators.
 Carry out cost estimations for reaching the hardest-to-reach and the most marginalized
 children and adolescents and integrate it into budgeting process. Explore innovative
 financing options for smarter and more efficient investment.
- Promote decentralized accountability and provide comprehensive school support for local actions and solutions, in order to tackle unique equity challenges in a context-specific manner and through cross-sectoral collaboration and approaches.

Target 4.6: Youth and Adult Literacy and Numeracy

- Allocate more financial and human resources or develop innovative financing systems to increase the adult literacy rates and functional literacy skills, particularly among younger generations in Southern Asia.
- Support the departments responsible for non-formal, alternative education and lifelong learning to **digitally transform literacy programmes** and contents. In response to the COVID-19 pandemic, develop online learning content for primary and secondary levels and adapt them for adult online learning, which would represent a significant new opportunity to reach more people at a lower cost than face-to-face programmes.
- Increase and diversify data collection efforts at national level on the proportion of
 the population with the minimum proficiency in functional literacy and numeracy
 skills by developing appropriate policies and strategies to undertake functional
 literacy skills assessment surveys through various channels such as existing
 household surveys, developing functional skills survey modules and stand-alone
 assessment programmes.
- Analyse **data consumption** by gender, age, and region at national level with ministries of telecommunications and technology companies.

Target 4.7: Sustainable Development and Global Citizenship

- Ensure that national policies and curricula reflect the concepts of economic sustainability, gender equality, and a culture of peace and non-violence, as well as orientation of global citizenship, global systems, structures and processes as well as analysis and action through development of standards and procedures for regular reviews.
- Improve assessment strategies and methods on 21st century skills or transferable competencies at various levels (regional, national, school, or classroom-based assessments) by learning from emerging lessons from previous assessments (such as the 2019 SEA-PLM assessment).
- Design and promote programmes on 'climate smart education' by engaging a wide range of stakeholders including students, teachers, parents and community members, in order to transform their schools, communities and the entire education system to adapt and become more resilient to current and future climate-related risks through innovative data collection, analysis and actions.

Target 4.a: Education Facilities and Learning Environments

- Expand and improve access to electricity and connectivity, particularly in primary schools in lower-income countries, to enable adequate, appropriate and sustainable use of ICT infrastructure for teaching and learning (including distance or blended learning). Access to electricity and internet will be a priority agenda globally, with large global initiatives such as GIGA connect aiming at connecting 3.7 billion learners to the internet by 2030. In response to the COVID-19 pandemic, adapting such initiatives to the local context in terms of pace of scale-up and modalities to reach all learners will present an opportunity to prepare for potential future shocks and closures. Future education systems should be prepared to function irrespective of whether schools are opened or closed, and be capable of reaching all learners at all times. Online learning strategies and plans must also comprise measures to protect children from online risks. Mitigating the risk of further widening the digital divide will be the greatest challenge for governments to address, as the hardest and most expensive to reach with electricity and internet are often disadvantaged populations living in remote areas with poor levels of service.
- Ensure all schools, especially pre-primary, primary and secondary schools, are
 equipped with disability-friendly infrastructure and materials and WaSH
 facilities, in order to provide equal opportunities from an earlier age.
- Invest in programmes to address both physical and online bullying and discrimination (such as those related to sexual orientation and gender identity or expression) to create safer and equitable learning environments.

Target 4.b: Scholarships

- Expand scholarship aid to increase the number and proportion of **scholarships for lower-income countries**, particularly targeting excluded groups of adolescents and youths in least developed countries, and small island developing states in the Asia-Pacific.
- Increase cooperation with other countries to foster cross-border higher education, as an opportunity to foster diversity, tolerance, understanding, and help shape international leaders.
- Strengthen **data collection** on the volume of ODA flows for scholarships by sector and types of study, as well as the number of higher education scholarships awarded by beneficiary countries.

Target 4.c: Teachers

- Strengthen pre- and in-service **teacher training** linked to national teacher competency standards to increase the proportion of qualified teachers, especially in Southern Asia and Oceania. In response to the COVID-19 pandemic, the **capacity of teachers** and school personnel needs to be strengthened urgently, with their needs assessed, prioritized and sequenced in each context. As first-line responders in schools, teachers are now tasked to carry out and support a range of activities, including but not limited to: health screenings, assessment of children's learning and well-being (such as their psychosocial status), ensuring the continuity of student learning through multiple, flexible means. As governments develop their safe school reopening plans, teacher capacity development needs should be assessed in each context, prioritized and sequenced (see more in Box 6).
- Address qualified teacher shortages at pre-primary education level through increased funding and specialized teacher education programmes.
- Design and implement appropriate incentive packages to reduce high teacher turnover and reduce attrition rates, especially among male teachers and at preprimary education level.
- Ensure **equitable allocation, deployment and management** of teachers and other resources/support to the most disadvantaged schools and areas.



Recommendations by SDG 4 Excluded Groups

Drawing from country experiences in the region, this review identified good practices, policies, strategies and programmes that would help to address the challenges faced in ensuring equity and inclusion in implementing SDG 4. In particular, as part of the thematic analysis presented in Chapter Four, specific recommendations are targeted towards the six identified **excluded groups** as follows:

Disabilities

- Promote advocacy and education programmes about delays and disabilities for parents and other caregivers.
- **Establish cash transfers** (incentives) to parents and caretakers for sending children with disabilities to school or providing alternate means of learning.
- Design and implement **disability-focused early childhood intervention** policies and practices through early diagnosis, referral and treatment.
- Ensure **disaggregation of monitoring and surveillance data** by disability, using the Washington Group Short Set of Disability Questions and the Washington Group UNICEF Child Functioning Module.⁵³
- Develop and implement disability-inclusive education programmes and schools
 through inclusive teacher pedagogy, accessible facilities, assistive devices and classroom
 assistance, as well as revised learning materials and assessment protocols that are
 adapted and adjusted to the needs of students with disabilities. In response to the COVID
 pandemic, governments should ensure the inclusiveness of responses from the outset
 rather than afterthought, including adaptation of various learning options and modalities
 to ensure continuity of learning for students with disabilities. Working with organizations
 for persons with disabilities is crucial.
- Build capacity and enhance knowledge of government officials and stakeholders on assistive technologies for learning.

53 See the Washington Group on Disability Statistics Questions Sets.

Gender

- Promote advocacy and affirmative action for **gender parity in enrolment**, **completion**, transition, and achievement through gender-responsive and transformative policies, gender audits of curricula, textbooks, materials, pedagogies, gender-sensitive facilities, gender quotas, and cash transfers to support girls or boys (depending on the country situation).
- Develop policies to promote **gender balance within the education workforce** at all levels and functions. This includes recruitment and promotion within the education system, for instance through incentives to recruit men into teaching positions at pre-primary or primary level, and women in higher grades and management roles.

Socio-Economic Status

- Subsidize schools and families to cover educational costs and provide fee waivers and other **financial incentives** (including innovative conditional cash transfers based on their learning efforts) for economically disadvantaged children to access education at all levels.
- **Abolish school fees** particularly at higher levels of education (secondary and above, in addition to basic level).
- Conduct situation analysis and develop strategies to address the impact of private tuition so that children of poorer families are not academically disadvantaged compared to their wealthier peers.
- Design and implement **enrolment schemes** that allow children of disadvantaged families to enrol in popular public schools through quota systems, while striving towards improving the quality of all schools.

Location (urban-rural-remote)

- Ensure the provision of **early childhood programmes in rural, remote and disadvantaged areas** through supporting home-based programmes and minimum provision of resources to small ECD centres.
- **Support small schools**, taking into account specific contexts and needs, through provision of additional resources needed to reach the same quality of education provided in larger and better-resourced schools. This includes training to support multi-grade teaching and recruitment of teaching assistants from the community.
- **Provide transportation** to larger schools, satellite schools, boarding schools, and schools which combine primary and secondary levels as an alternative to small schools.
- Develop effective mechanisms to allocate and retain qualified teachers in remote and rural schools through hardship allowances, extra training and promotion opportunities.
- Adapt the **national curriculum** to increase relevance to the socio-economic and cultural context of rural and remote communities, for instance through a 'local content curriculum'.
- Adapt school calendars and timetables to suit local economic and cultural contexts.
- Implement **multi-grade teaching** through teachers equipped with adapted pedagogy and teaching materials.

Language, Ethnicity and Culture

- Develop and implement **MTB-MLE** policies, at least for early education and initial literacy, to enable students to master other curricular subjects and facilitate transition to the national language through the mother tongue.
- Develop MTB-MLE **curricula** to ensure coverage of essential national curricular content and local content related to local languages, cultures, and traditions.
- Develop **textbooks** and other materials in mother tongue languages, both as translations of the official textbooks and new materials.
- Identify and train **teachers** capable of teaching in the mother tongue to assist children in making a successful transition to the national language(s).
- Promote mother tongue languages as a **subject** rather than as the language of instruction so that its implementation is both practical and politically more acceptable.
- Invest in linguistic support for ethnic and minority languages through **standardized** orthography, grammar, dictionaries, children's books and supplementary study materials.

Refugee, Migrant or Emergency Status

- Develop **curriculum content suitable for children of refugees and migrants** that relates to their possible future scenarios, cultural identity, adapting to their current location and preparing for return or life in a third country.
- Effectively utilize the **digitalized contents** of their countries of origin.
- Provide remedial education and psychosocial and emotional support to children of refugees, migrants, and the internally-displaced to ensure they access appropriate level of education and grades and receive counselling and mental support.
- Negotiate and implement bilateral, regional or international agreements on the mutual recognition of educational certification among institutions and countries.
- Allow flexibility in examination schedules and home study for students affected by emergencies.
- Develop and implement school **admission policies** which provide equal opportunities for undocumented children and adolescents to access education.

Conclusion: A Call to Reimagine Education

COVID-19 represents one of the greatest challenges to organized learning in history. However, even before its devastating impact, Asia-Pacific countries were facing an unprecedented learning crisis. Millions of children and young people are not developing the skills they need to break out of poverty and thrive in the complex societies of the near future. Yet the pandemic has taught us many vital lessons about organized learning: it has revealed the importance of schools and education to societies, and children and youth as social beings. In some contexts it has demonstrated the robustness and flexibility of education systems and the professionals within them, while in others it has exposed the weaknesses and fragility of existing systems. It has also illustrated the vital contributions that partners outside the traditional education system can play, and the crucial role of education in making individuals,

wider societies and the planet safer. The massive shock of the pandemic has therefore prompted us to reimagine education, its delivery systems and its content.

A modern education should build and accredit basic skills such as reading, writing and mathematics, but also skills such as problem-solving, creativity and critical thinking that young people need for work, to live life with dignity and possibilities, and to engage productively in their communities and societies. We must build back better to achieve truly equitable, inclusive and quality learning for all in the Asia-Pacific region by 2030.

UN agencies and development partners must support governments to navigate trade-offs so that a contextually relevant strategy for education technology uptake is integrated within national education sector plans. This should be at a pace

that is sustainable for the country, while meeting the present needs of those (particularly the most disadvantaged) who are supported to learn through all existing modalities whether through low-tech or no-tech solutions.

Work is already underway in attempting to narrow the digital divide. UN agencies such as UNICEF have launched the GIGA Initiative with ITU⁵⁴ to connect all schools, and the Learning Passport partnership with Microsoft⁵⁵ to make digital learning more accessible to all children, including displaced and refugee children, as well as children with disabilities. UNICEF is leading the Reimagine Education initiative to combine these initiatives with complementary efforts including young people's engagement and affordable devices and content to ensure every child and youth has access to high quality digital learning. The implications of universal internet access are huge, both in terms of schools and life-long learning, as well as in connecting even the most remote communities across different sectors.

Many countries in the Asia-Pacific are Global Partnership for Education (GPE) partner and eligible countries, where UN agencies and International Finance Institutions play a key role in terms of education sector coordination and support. This provides a key strategic opportunity for governments and local education groups to ensure that effective distance learning, through digital but also low- and no-technology modalities, is properly integrated into sector analyses and policy and planning processes. At the same time, the expansion of Generation Unlimited⁵⁶ (mostly in Southern Asia and South-eastern Asia), provides opportunities to tap into new partnerships and opportunities. It can also link them with those core policy and planning processes to ensure that the equitable development of

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connectivity and online learning solutions also benefit adolescents and youth to improve the acquisition of crucial 21st century skills.

In order to address persistent gender inequalities, education sector analyses and policy and planning processes will have to be truly gender transformative. This means they need to redress gender inequalities, remove structural barriers and empower disadvantaged populations. But they must first be at least gender-responsive by identifying and addressing the different needs of girls and boys, women and men, and promoting equal outcomes. UNESCO, UNICEF and partners stand ready to support countries to develop genderresponsive interventions and recovery plans, or to adjust existing ones accordingly. With GPE, they are also supporting many Asia-Pacific countries to prepare gender-responsive sector plans in 2021 or review existing ones to adjust to the COVID-19 situation, including related capacity building of national planners and analysts.

UNESCO and UNICEF co-chair the Learning and Education 2030+ Networking for Asia and Pacific and work closely with regional institutions such as SAARC, ASEAN, SEAMEO, SPC, ESCAP and ESCWA. Under this network, two new sub-groups are being created to address two immediate priority needs: one on Digital Transformation in Education co-led by UNICEF and ITU and one on School Health, Nutrition and Wellbeing. The group on Digital Transformation in Education will identify the common desired outcomes of member organizations in relation to education and digital transformation and will map out the key elements that affect these outcomes. The findings will then be shared widely and used to inform regional and country level activities.

The group on School Health, Nutrition and Wellbeing will facilitate a sustained regional approach to collective evidence-building,

⁵⁴ See Giga Connect to learn more.

⁵⁵ See <u>Learning Passport</u> to learn more.

⁵⁶ See Generation Unlimited to learn more.

advocacy and action, initially prioritizing responses to COVID-19. It will mobilize and support cross-sectoral partnerships on School Health, Nutrition and Wellbeing, particularly between the education and health sectors and especially at the country level. The creation of this group reflects growing needs around mental health and psychosocial support as well as broader child protection issues, which have been exacerbated by COVID-19. It also reflects the key role education, as a platform and provider of human resources, has in addressing the holistic needs of the child, which emphasizes the importance of providing education systems and staff with the required resources to perform all their expected functions and collaborate effectively with service providers in other social sectors.

In addition, the already established Asia-Pacific Disability Inclusive Education Working Group, co-chaired by UNESCO, UNICEF and Leonard Cheshire, will intensify its efforts to realize the rights to inclusive and equitable quality education for children with disabilities across the Asia-Pacific region. In order to achieve this goal, the group has three core functions: 1) Coordination, communication and partnerships: connecting those involved in disability-inclusive education at national, regional and international levels for the purpose of developing a 'community of practice', sharing lessons learned, identifying innovative approaches, and more; 2) Capacity development: connecting actors with experts in disability-inclusive education to promote capacity-building and collaboration; and 3) Knowledge Management: supporting joint publications on disability-inclusive education and serving as a regional repository for information on activities, good practices and resource materials on disability-inclusive education. Similarly, the group on Multilingual

Education will continue to improve the level and use of knowledge based on what is being done and what is working effectively in implementing multilingual education.

Partnerships led by UIS, with support from UNESCO and UNICEF, are already in place to enhance the monitoring of progress towards equitable quality education for all, for instance the ongoing SDG 4 benchmarking process and development of shorter-term SDG 4 targets on a more focused set of indicators.

Substantive partnerships are also being established with ADB and the World Bank. There are therefore opportunities to bring International Finance Institutions and interagency support together to help accelerate investments in key resources for learning across the region, especially reforms with heavier financial and technical demands. This includes ensuring all schools have functioning WaSH facilities, real-time data collection and use, and harmonizing and linking data systems within education and with other sectors. Those partnerships can bring the technical expertise needed, as well as potential seed-funding and capacity development opportunities, to support Asia-Pacific countries as they seek to restart and accelerate progress towards SDG 4.

In many ways, the pandemic and its response have guided the way forward for education and learning in the region, with the potential to overcome the all too slow progress towards SDG 4 over the last five years. A future where schools are open and children are learning is of the utmost national importance. It is a future where leaders prioritize and invest in having all citizens learning, where all barriers to education are overcome and no learner is excluded. Now is the time for action – a unique moment in history when we can reimagine education and learning and build back better.

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Annex 1

Asia-Pacific Member States by Sub-region⁵⁷

Central Asia

Azerbaijan⁵⁸

Kazakhstan

Kyrgyzstan

Mongolia

Tajikistan

Turkmenistan

Uzbekistan

Eastern Asia

China

China, Hong Kong Special

Administrative Region⁵⁹

China, Macao Special

Administrative Region⁶⁰

Democratic People's

Republic of Korea

Japan

Republic of Korea

Oceania

Australia

Cook Islands

Fiji

Kiribati

Marshall Islands

Micronesia (Federated States of)

Nauru

New Zealand

Niue

Palau

Papua New Guinea

Samoa

Solomon Islands

Tokelau⁶¹

Tonga

Tuvalu

Vanuatu

Southern Asia

Afghanistan

Bangladesh

Bhutan

India

Iran (Islamic Republic of)

Maldives

Nepal

Pakistan

Sri Lanka

South-eastern Asia

Brunei Darussalam

Cambodia

Indonesia

Lao People's Democratic

Republic

Malaysia

Myanmar

Philippines

Singapore

Thailand

Timor-Leste

Viet Nam

⁵⁷ Note that sub-regional groupings may vary by organization and UN agency. This report employs UIS sub-regional groupings in order to be consistent with statistical monitoring of SDG 4.

⁵⁸ Azerbaijan is not classified as an Asia-Pacific UNESCO Member State but is included in the UIS grouping for the region.

⁵⁹ Hong Kong, SAR of China is not a UNESCO Member State but is included in the UIS grouping for the region.

⁶⁰ Macao, SAR of China is an Associate Member State

⁶¹ Tokelau is an Associate Member State

Annex 2

Rationale and Methodology of the Review

Rationale

In the Asia-Pacific region, Learning and Education 2030+ Networking for Asia and Pacific was established to lead the implementation and progress review of SDG 4. A Regional Roadmap⁶² was prepared to facilitate regional cooperation and partnerships among stakeholders and to serve as a strategic guide for Member States in implementing and monitoring SDG 4 (UNESCO Bangkok, 2018a). The Roadmap maps out SDG 4 implementation into five phases:

- Phase 1: Foundation Building (2015–2016)
- Phase 2: Clarification of Targets towards SDG 4 implementation and the 1st regional progress review (2017–2019)
- Phase 3: SDG 4 Implementation and a regional mid-term review (2020–2023)
- Phase 4: Acceleration towards the targets and a review of successes and remaining challenges (2024–2027)
- Phase 5: Into the Future (2028–2030).

The Roadmap's key strategies are centred on three main areas of support: 1) advocacy, information and knowledge exchange; 2) capacity development; and 3) monitoring.

One of the key regional milestones articulated in the Roadmap is the 1st regional SDG 4 progress review. With more than four years having already passed since the adoption of the Education 2030 agenda, a review of the region's first 5-year progress (2015–2020) toward SDG 4 is warranted. The focus of the review is on the overall progress at the regional and sub-regional level. Countries were strongly encouraged to participate in, and contribute to, the review exercise in terms of the sharing of cases of good practices, (scalable) innovations, and lessons learned. This review process also intends to further raise awareness and reinvigorate the commitments of countries, partners and other stakeholders with regard to the internalization of the full vision of SDG 4-Education 2030.

This analytical 5-year progress review is also intended to present an updated regional baseline against which countries can also measure themselves at the mid-term review of SDG 4 (scheduled towards 2023) and to introduce a mechanism to collect case studies of good practices which will also be showcased in the SDG 4 regional knowledge portal⁶³ as a major reference resource for countries and partners. In addition, this 5-year progress review can help countries to get ready for any Voluntary National Review (VNR) that they plan to undertake in the future.

⁶² The Regional Roadmap for the SDG4-Education 2030 Agenda in Asia and the Pacific (2015-2030) can be accessed here.

Methodology

Document review

A large number of documents was reviewed related to:

- development trends in the Asia-Pacific
- the nature and extent of equity/inequity and inclusion/exclusion in education in the region
- progress toward the targets of SDG 4 linked to current or planned policies, strategies, and programmes
- challenges remaining in the achievement of these targets

The documents reviewed in analysing these issues included government reports, development agency assessments and analyses, research articles, blogs and newspaper articles.

Identification of the factors of exclusion relevant to the review

A further step in the methodology was to clearly identify those factors of exclusion of particular relevance to this review. Based on a range of analyses looking at exclusion in the region, a consultative Expert Meeting with a range of partners and government representatives, and an agreement with the Secretariat for this review, the following excluded groups were identified:

- disabilities and delays
- gender and gender diversity
- socio-economic status
- rural and remote location
- ethnic and linguistic status
- migrant and refugee status, including Internally Displaced Persons (IDP)

Target analysis of SDG 4

The target analysis is the result of efforts co-led by UNESCO Bangkok, the UNESCO Institute for Statistics (UIS) and UNICEF East Asia and Pacific Regional Office (EAPRO) and UNICEF Regional Office for South Asia (ROSA), and supported by the members of the technical Peer Review groups of the Asia Pacific Regional Network Group on Learning and Education 2030+. To the extent possible, these analyses were conducted on a regional and sub-regional basis, but this was not always possible, therefore many of the examples below are from national studies and data.

Case studies of inclusion in education

An announcement was made through relevant social media for the writing of case studies of inclusion in education. 46 applications were received and eleven were accepted for further development and eventual inclusion, in shortened form, in Chapter Five.

Secretariat and technical peer reviews

The original detailed outline was reviewed by the Secretariat for this review, and the first draft, both by the Secretariat and by technical peer review groups composed of focal points from agencies or organizations concerned with one or more of the ten SDG 4 targets. The task of the latter was to focus on the data and analysis of their particular target(s) of interest, and to review, more broadly, the entire draft. Based on comments received from this process, a second draft was then developed for further review and revision before final submission.

Key informant interviews

A range of key informant interviews were held with respected and knowledgeable educators from each of the sub-regions of the Asia-Pacific – Central Asia, Southern Asia, South-eastern Asia, Eastern Asia and Oceania. The purpose of the interviews was to gain a better understanding of the trends in various kinds of development, their educational implications, especially linked to the challenges of equity and inclusion, and ongoing response to these challenges.

Sub-regional validation exercise

During this review process, sub-regional validation exercises were carried out – differently in different sub-regions, but largely as virtual conferences.

Limitations

There has been a range of limitations in writing this report. These include:

 The lack of comparable data across countries and sub-nationally within countries.

- Difficulties in formulating sub-regional analyses both because of a lack of national data and inconsistencies in the categorization, labelling and identification of member countries in sub-regions.
- A lack of information with regard to the best practices found for the various responses to each of the excluded groups.
- The challenges of developing the thematic and target analyses given the current and likely future impact of the COVID-19 pandemic.

Annex 3

SDG 4 Targets and Indicators

The following indicators for monitoring progress towards SDG 4 (UIS, 2020), are presented based on their respective target or mode of implementation.

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

- 4.1.1 Proportion of children and young people (a) in Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex
- **4.1.2** Completion rate (primary education, lower secondary education, upper secondary education)
- **4.1.3** Gross intake ratio to the last grade (primary education, lower secondary education)
- **4.1.4** Out-of-school rate (primary education, lower secondary education, upper secondary education)
- **4.1.5** Percentage of children over-age for grade (primary education, lower secondary education)
- **4.1.6** Administration of a nationally representative learning assessment (a) in Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education

4.1.7 Number of years of (a) free and (b) compulsory primary and secondary education guaranteed in legal frameworks

Target 4.2

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

- **4.2.1** Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial wellbeing, by sex
- **4.2.2** Participation rate in organized learning (one year before the official primary entry age), by sex
- **4.2.3** Percentage of children under 5 years experiencing positive and stimulating home learning environments
- **4.2.4** Gross early childhood education enrolment ratio in (a) pre-primary education and (b) early childhood educational development
- **4.2.5** Number of years of (a) free and (b) compulsory pre-primary education guaranteed in legal frameworks

Target 4.3

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

- **4.3.1** Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex
- **4.3.2** Gross enrolment ratio for tertiary education by sex
- **4.3.3** Participation rate in technical-vocational programmes (15- to 24-year-olds) by sex

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

- **4.4.1** Proportion of youth and adults with ICT skills, by type of skill
- **4.4.2** Percentage of youth/adults who have achieved at least a minimum level of proficiency in digital literacy skills
- **4.4.3** Youth/adult educational attainment rates by age group, economic activity status, levels of education and programme orientation

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

- **4.5.1** Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated
- **4.5.2** Percentage of students in primary education whose first or home language is the language of instruction

- **4.5.3** Extent to which explicit formula-based policies reallocate education resources to disadvantaged populations
- **4.5.4** Education expenditure per student by level of education and source of funding
- **4.5.5** Percentage of total aid to education allocated to least developed countries

Target 4.6

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

- 4.6.1 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex
- 4.6.2 Youth/adult literacy rate
- **4.6.3** Participation rate of illiterate youth/adults in literacy programmes

Target 4.7

By 2030, ensure all learners acquire 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

- 4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment
- **4.7.2** Percentage of schools that provide life skills-based HIV and sexuality education
- **4.7.3** Extent to which the framework on the

- World Programme on Human Rights Education is implemented nationally (as per the UNGA Resolution 59/113)
- **4.7.4** Percentage of students by age group (or education level) showing adequate understanding of issues relating to global citizenship and sustainability
- **4.7.5** Percentage of 15-year-old students showing proficiency in knowledge of environmental science and geoscience

Target 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

- 4.a.1 Proportion of schools with access to:

 (a) electricity;
 (b) Internet for pedagogical purposes;
 and
 (c) computers for pedagogical purposes;
 (d) adapted infrastructure and materials for students with disabilities;
 (e) basic drinking water;
 (f) single-sex basic sanitation facilities;
 and
 (g) basic handwashing facilities (as per the WaSH indicator definitions)
- **4.a.2** Percentage of students experiencing bullying in the last 12 months
- **4.a.3** Number of attacks on students, personnel and institutions

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, information and communications technology, technical, engineering and scientific programmes in developed countries and other developing countries

- **4.b.1** Volume of official development assistance flows for scholarships by sector and type of study
- **4.b.2** Number of higher education scholarships awarded by beneficiary country

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

- 4.c.1 Proportion of teachers in: (a) pre-primary education; (b) primary education; (c) lower secondary education; and (d) upper secondary education who have received at least the minimum organized teacher training (such as pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country, by sex
- **4.c.2** Pupil-trained teacher ratio by education level
- **4.c.3** Percentage of teachers qualified according to national standards by education level and type of institution
- **4.c.4** Pupil-qualified teacher ratio by education level
- **4.c.5** Average teacher salary relative to other professions requiring a comparable level of qualification
- **4.c.6** Teacher attrition rate by education level
- **4.c.7** Percentage of teachers who received in-service training in the last 12 months by type of training

Annex 4

Proposed Benchmark Indicators

No.	Benchmark Indicators	Level
1	Indicator 4.1.1 Minimum learning proficiency in reading and mathematics	Global
2	Indicator 4.1.2 Completion rate	Global
3	Indicator 4.1.4 Out-of-school rate	Thematic
4	Indicator 4.2.2 Participation rate one year before primary	Global
5	Indicator 4.c.1 Percentage of trained teachers	Global
6	Indicator: Education expenditure as share of budget and GDP	Education 2030 benchmarks
7	Indicator 4.5.1 [Equity indicator]	Global





5-Year Progress Review of SDG 4

- Education 2030 in Asia-Pacific

This report documents progress made towards the achievement of SDG 4 in the Asia-Pacific region since the ambitious vision for Education 2030 was set in 2015. It analyses the regional context, challenges and opportunities, and provides policy recommendations through the lens of the overarching themes of equity and inclusion, while also considering the impact of the COVID-19 pandemic.



Stay in touch

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