# Maldives
Case Study

Situation Analysis on the Effects
of and Responses to COVID-19
on the Education Sector in Asia

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October 2021

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Foreword

> The pandemic caused a major children's rights crisis: all service sectors being profoundly impacted, with the most disadvantaged being disproportionately affected.

COVID-19 – possibly the largest pandemic the world has ever seen- led to an economic crisis probably more radical and global than ever before; as well as disruption of learning on an unprecedented scale. The pandemic caused a major children's rights crisis: all service sectors being profoundly impacted, with the most disadvantaged being disproportionately affected.

In response, with support from the Global Partnership for Education, UNICEF and UNESCO joined forces with Mott MacDonald, Cambridge Education to carry out a situation analysis, primarily to generate analyses to inform strategic responses to the crisis going forward. While the extension and duration of the pandemic required to invest more time to produce the final analyses and reports, fortunately information had already been discussed through webinars and national conversations with Ministries of Education and other partners across large parts of the Asia Pacific region.

Furthermore, the reports continue to be of utmost relevance given subsequent waves of COVID-19 sweeping across the world in 2021 and very likely in 2022 as well. The task of learning from the crisis and how to mitigate its effects in education is on-going. More than one academic year has now been lost for many children. To ensure continuity of learning whilst schools are closed, the delivery of education is radically changing today through distance education: digital, blended or hybrid learning have become part of the new learning reality which all Governments, teachers and learners will have to adjust to.

While major efforts are needed to mitigate the learning loss of those children who return to school in the post-COVID-19 recovery phase, we must also remember that many children were not learning before the crisis and several million were not even in schools. The reports therefore also explore opportunities to build back better and to re-imagine education; to shift from fact-based didactic methodologies to competency-based approaches, which are more flexible, better respond to the holistic needs and aspirations of all children, and provide opportunities for life-long learning as per the Sustainable Development Goals (SDG) 4 agenda.

While the suite of reports provided within the Regional Situation Analysis are particularly relevant to the Asia Pacific region, contexts of course vary considerably across our huge region. At the same time, the reports may also provide insights that are relevant to other regions around the world. Hopefully the findings, including the country case studies, and regional budget needs analysis will help governments resume and accelerate progress towards SDG 4. The way education is conceptualized and delivered is changing fast, and the transformation journey will be steep and full of challenges. Governments, donors, all partners and the private sector will need to work together, not only to get the strategies and levels of investment right, but to build more resilient, effective and inclusive systems, able to deliver on the promise of education as a fundamental human right for all children, whether schools are open or closed.

Shigeru Aoyagi
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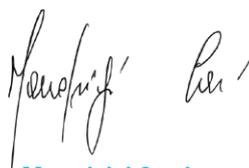
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List of acronyms

COVID-19   Coronavirus disease

DOIE   Department of Inclusive Education

ERP   Education Response Plan

ESQID   Educational Supervision and Quality Improvement Division of MoE

GDP   Gross domestic product

GPE   Global Partnership for Education

GER   Gross Enrolment Ratio

HPA   Health Protection Agency

ICT   Information and communications technology

IEP   Individualized education plan

IGCSE   International General Certificate of Secondary Education

MEMIS   Maldives education management information system

MHPSS   Mental health and psychosocial support

MoE   Ministry of Education

MoF   Ministry of Finance

NER   Net Enrolment Ratio

NIE   National Institute of Education

OOS   Out-of-school

QAD   Quality Assurance Department of the MoE

SEN   Special educational needs

SEOPs   School emergency operational plans

SOPs   Standard operating procedures

TRC   Teaching Resource Centre

UNICEF   United Nations Children's Fund

UNESCO   United Nations Educational, Scientific and Cultural Organization

Executive summary

Introduction

UNICEF and UNESCO have come together to conduct a rapid assessment of the effects of COVID-19 on education across the Asian continent and the responses of individual countries to this pandemic. Cambridge Education, operating as part of Mott MacDonald, has been commissioned by UNICEF and UNESCO to conduct this rapid assessment. The objectives of the assessment are:

- To assess and estimate the various impacts of the COVID-19 pandemic on the education sector and stakeholders (children, adolescents, teachers, parents, education officials etc.) in Asia (East, Southeast and South Asia sub-regions);
- To examine the policy and financial implications of progress towards achieving SDG4 (Education) by 2030;
- To identify examples of promising responses and strategies in education and associated social sectors, which can be shared with other countries.

Country background

The Republic of Maldives is a small island state in the Indian Ocean made up of low-lying coral islands, comprising 22 natural atolls. About 200 of the approximately 1,190 islands are inhabited. The country is divided administratively into 20 Atolls,[1] and is centrally run from the capital, Male', where most of the population is concentrated.

"Prior to the pandemic, Maldives was tracking well for SDG4 Quality Education"[2]

This quotation, whilst later modified by significant caveats, points to the positive changes that have been seen in Maldives: education has been made dramatically more available across the many islands of the country, to all levels of society and at higher quality, and aligned increasingly with international standards, than had been imagined in the relatively recent past. This improvement went hand in hand with the growth of the economy and access to 21st century infrastructure, but along with these gains had come new pressures and difficulties in social, environmental and health domains.

Maldives has over the past four decades transitioned from a fishing-based to a tourism-based economy. Participation in primary and secondary school education, with a largely western style curriculum, which had been the preserve of few, has become the default expectation. Male' has in the past 30 years changed rapidly from an island of mostly single-storey houses, with water collected from rooftops or wells, and sand roads with few cars, to a high-rise city with traffic congestion, tarmac roads and a piped desalinated water supply. Infrastructure has changed from multi-day sailing journeys for inter-island transport and shortwave radio relays to the remote islands to island-hopping seaplanes, mobile phone networks and internet links running the length of the country.

Effects of COVID-19 on the education sector in Maldives

The immediate effect of COVID-19 was to interrupt all school-based teaching and learning, as schools were closed and pupils instructed to stay at home. All schools closed on 19 March 2020, following mid-term school break; schools began to reopen on islands free from COVID-19 from 5 July, and in Greater Male' from 4 October 2020. Early in the pandemic, decisions were taken rapidly to shift the school education system to a contingency setting under which teaching continued by remote means, utilizing TV, internet and informal social media/mobile phone network communications.

Although internet reach in Maldives is much wider than in many countries, and mobile networks and internet services reach every island, technological infrastructure and access to the internet are not ubiquitous. Access to learning was reduced, especially for those with limited resources. To mitigate this, an allowance for data charges was provided to parents and teachers to support communication, but this was only a small contribution toward the actual costs.

Teachers and students were at home, unable to go to school. This change was abrupt, due to the unprecedented circumstances. It continued for varying durations in different locations, according to local school closure and reopening dates. Schools and students had to find ways of communicating and of continuing teaching and learning in this new situation. Rather than waiting to develop fully piloted materials and processes, the approach adopted was to move rapidly to continue teaching and learning, and to develop and refine the new approach as necessary.

Education sector response to COVID-19

Maldives responded swiftly to the arrival of COVID-19. All schools and offices were closed, restrictions were placed on movement and social mixing, and the international border was closed. As the transmission of the virus progressed, the government initiated a strategy of school closure and reopening differentiated by location. After initial reopening, schools on most islands remained open, while schools in Male' were closed again, before gradually and partially reopening.

The curriculum was condensed, daily hours were reduced, and the school week shortened to four days (the fifth day was for teachers to prepare and plan new lessons). The school calendar was altered. Assessment was downplayed to be more for reassurance, feedback and activity rather than for summative grading; and formal examinations were called off or postponed. Teachers were supported to use applications for marking and recording student assignments and to record student attendance. The Maldives education management information system (MEMIS) began to engage with EduPage, a school and student records and timetabling package, for which every school had an annual licence paid by the Ministry of Education (MoE).

Maldives produced an Education Response Plan (ERP) for COVID-19 in May 2020, and standard operating procedures (SOPs) were introduced for schools to follow when they reopened. Schools reopened after a brief closure on most islands, except where there was a case of COVID-19. Schools remained closed in Male', where controlling the spread of the virus by isolating infected people was challenging due to the density of population and the mixing of people from different locations.

Use of technology and remote learning

Remote learning was adopted in various forms – pre-recorded lessons broadcast on TV ('Telikilaas'); live internet-mediated classes; or voice calls, video calls, document-sharing and chats (one-to-one or in groups) using the popular Viber mobile phone application. Android tablets had recently been provided to all school students of Grade 3 and above, and they became important for continuity of learning. Teachers received intensive training on how to use the new technology; some were trained as trainers. Schools moved their teaching entirely online, using various Ministry-approved applications. The TV lessons were also broadcast nationwide on public service TV channels, and the Telikilaas material included videos specially for learners with an individualized education plan (IEP) or special education needs (SEN). The timetabling constraints, and the range of different IEPs to serve meant there was a limited amount of input suited to any individual student with SEN.

Global experience suggests that online remote learning is not equivalent to face-to-face learning. This is particularly the case in terms of developing skills rather than building knowledge. Learners need to practise skills, and in many cases to watch them being demonstrated, and they need on-hand guidance and immediate feedback as they try them out. This is often not attainable through online learning.

Schooling also has benefits other than academic learning. These include socialization, and building mutual understanding and acceptance, which contribute to social cohesion. Children also benefit emotionally from being with their friends and peers, and from having a structured day in a secure environment.

Schools may also offer services which are missed when children are not in school. These include comprehensive sexual and health education, the detection of children who have missed immunization campaigns, the detection of and support for disabilities or impairments, and the detection of child protection issues such as gender-based violence or mental health and psychosocial support (MHPSS).[3]

Remote learning offers opportunities as an equalizer once access for all has been guaranteed and may offer better quality education in terms of content. It may also increase demand for education. However, it cannot replace a shared physical space for learning and interaction between children.[4]

Challenges faced by the education sector – inclusion and the digital divide

Efforts were led by the Department of Inclusive Education (DOIE) to ensure inclusion of learners with special educational needs, but major challenges remained. There was general awareness but scarcity of clear data on whether vulnerable groups – including those with limited internet access, those in poverty, and those moving from Male' back to their home island – missed out on education more than others.

Contingency plans were developed and shared during the school break week for continuation of learning in the event of school closure. Pupils from Grade 3 upwards had been recently provided access to computer tablets, which were swiftly brought into use as key learning aids.

Remote learning was adopted by means of TV broadcasts and online classes. Teaching and learning from TV programmes involves skills and procedures which differ from the classroom processes with which learners and teachers are familiar. Much of the teaching support (which is part of a good, interactive classroom lesson) is lost.

There was a range of technical challenges associated with adopting online teaching and learning. They included connectivity, the cost of data, and the quality of available and newly made online learning materials. Other challenges included limitations in providing support to remote learners, inexperience and low technical expertise in online teaching, difficulties in monitoring and assessing students' work and in providing psychosocial support.

Access and participation in learning – provision of remote learning

Maldives is better placed than many countries to adopt internet-based learning, but to do so still represents a challenge economically and in terms of connectivity, and for effective teaching, learning and individual learner support. The use of internet-mediated teaching, learning and school management and record keeping, using packages such as Google Suite and EduPage is useful and is expected to continue once all schools can fully reopen.

As well as enriching the learning process, remote learning helps equip students for modern life. The use of technology for remote learning provides both blended learning when schools are open and a ready resilience if schools need to close again in the future. The use of this technology should be integrated with conventional face-to-face classroom teaching, and television supported by mobile phone communications.[5] The use of televised lessons broadcast at set times remains useful, especially for young learners (pre-school and Grades 1 and 2) and to enable access where internet is unavailable. Building the capacity of teachers and students to use remote home-based learning effectively, and providing continuing support, is necessary for the approach to work.

Major attention, however, needs to be given to finding ways to include those likely to be marginalized, including those with complex learning profiles (IEP, SEN) by adapting the technology or compensating for its limitations. Students, parents and teachers need psychosocial support as well as academic and technical support when isolated from school and when schools have reopened.

The costs to the country and to learners and their families of using internet-mediated approaches need to be analysed, and economically sustainable options need to be adopted to ensure that connectivity is affordable and universally available. Alternative channels or subsidies may be needed to ensure equitable and genuine access. As part of this, subsidized deals with mobile network operators should be negotiated nationally to ensure adequate internet data packages are affordable for all teachers and learners.

The MoE and the government as a whole developed plans and responded to the rapidly changing context of the pandemic. A series of MoE circulars and accompanying guidance notes were produced and distributed to schools as the situation evolved. Schools proceeded to adopt remote learning, with timetabled viewing of nationally broadcast Telikilaas lessons, having school-based Google Classroom lessons, and developing and sharing recordings for posting to the national Filaa portal repository of Telikilaas lessons, subject to quality clearance.

Lessons learned

To build back better as Maldives adjusts to delivering education services through the pandemic and into the future, lessons learned included the importance of:

- Prioritizing access for disadvantaged and remote learners so they are not left behind.
- Establishing and enhancing the quality of Telekilaas (TV classes) for younger learners.
- Making use of key UNICEF resources to develop and enhance remote learning.
- Embedding the use of Google Classroom (or similar) as an intrinsic part of teaching and learning for older learners.
- Reviewing and deciding which national software education platforms to adopt.
- Improving integration of school EduPage (or Google Suite) records with the MEMIS, and access to MEMIS data by schools.
- Utilizing tablets in classroom teaching as well as remotely.
- Addressing the issues of connectivity and cost
- Reviewing the curriculum.
- Revisiting assumptions on student assessment.

Recommendations

The recommendations consider ways to build on the successes, plans and lessons learned from the COVID-19 experience

- Consolidate a full picture of the needs and situations of learners across Maldives.
- Monitor and assess the learning achievement of students.

- Continue to monitor children's attendance and schools' compliance with safety protocols.
- Strengthen the existing mechanisms for providing psychosocial support.
- Build capacity of teachers to teach, assess and support online.
- Build understanding and cooperation of parents to support students in their home-based learning
- Strengthen the staff capacity of the DOIE to enable the Department to fulfil its role
- Strengthen the support available to learners with SEN when using remote means
- Match the reliance on technology with infrastructure, connectivity and affordability.

Conclusion

The COVID-19 pandemic had various impacts on the education sector and stakeholders:

- Effective study time was lost as a result of school closure and reduced class hours once schools reopened.
- Stress was felt by both learners and teachers.
- The neediest children and the most disadvantaged were at risk of being left out by remote learning.
- A positive impact has been the catalytic effect of accelerating teachers' and school managers' uptake of digital opportunities for teaching and learning and for administration.

Examples of promising responses and strategies in education in Maldives arising from the COVID-19 situation include:

- A widespread shift to electronic rather than paper-based record keeping and assignment handling.
- The use of tablets was brought into play and can be integrated into school-based learning as well as remotely, to good effect.
- Experience is growing in how to create effective TV/downloadable video lessons, and quality will progressively be strengthened.
- Teachers are becoming more skilled and confident in teaching and supporting learners remotely.
- The school curriculum was streamlined and may be refreshed in an unexpected and beneficial way.

Country fact sheet

The table below provides a snapshot of the pandemic, the response of the education sector and some background information.

DIMENSION	INDICATOR/QUESTION	INFORMATION
Epidemiology	Date of first confirmed case	7 March 2020
	Date of first confirmed death	29 April 2020
	COVID-19 cases and deaths over time	13,106 confirmed cases and 47 deaths, as of 4 Dec 2020[6]
	Details about the pandemic and government responses and supports?	• The first cases of COVID-19 emerged in Maldives on 7 March 2020, imported from tourist resorts. The first case of community transmission was reported in the capital, Male', on 15 April. The Greater Male' region has been the epicentre of the outbreak, with sporadic outbreaks in other islands. • The government's response has been swift and decisive. A State of Public Health Emergency was declared and a National Emergency Operation Centre (NEOC) was set up. (The NEOC was phased out and its tasks shifted to Ministry of Health on 1 July). • Schools and government offices were closed quickly (on 19 March, following mid-term school break). A full lock-down was imposed in Male'. Travel restrictions have been imposed internally, along with closing international borders, introducing testing, high-profile public health campaigns, and pre-emptively quarantining arriving nationals. • Economic support to businesses and individuals was announced on 20 March in the form of a $162 million Economic Recovery Plan, including income support and cancellation of energy bills. An Education Response Plan was prepared, funding committed, and implementation begun. • Schools have opened and other restrictions eased progressively, with different regimes in the capital, Male', which is extremely crowded, and the other islands. Tourist resorts, which are the backbone of the economy, reopened, with strict controls imposed to avoid visitors contacting islands other than their resort between arrival at the airport and departure from the airport.
School closure	Were schools closed, partially or fully?	Fully closed initially
	Date of school closures	19 March 2020
	Date of school reopening	First schools reopened in islands free of COVID-19 from 5 July 2020. In the capital, Greater Male', schools began reopening from 4 October, with Grades 9–12.
	Have schools reopened fully or partially?	• Partially. Greater Male' schools reopened progressively. As of 16 Nov 2020, Grades 8–12 were reopened. Other island schools have mostly reopened, except on islands where there are COVID-19 cases. The situation is reviewed and closures or openings are renewed every 2 weeks. • Reopened schools operated a reduced timetable (4 days a week, reduced daily hours). Some schools adopted using shifts, or combining some days onsite and other days remote learning.
	What phase is the country currently? Phase 1, 2 or 3[7] and is this nationally or regionally?	• Phase 2, overall. While island schools have reopened except where there is an outbreak and higher grades of Male' schools have reopened, schools are closed and reopened sporadically, in response to changing COVID-19 status locally. • Schools remain using remote learning at least in part. Schools are operating with reduced timetables (4 days per week, with shortened daily hours), on various patterns (e.g., 2 days home-based, 2 days school-based learning). Male' capital schools remain closed for lower grades.
Key vulnerable groups	Key vulnerable groups affected by the impact of COVID-19 on the education sector	• Migrant students from other islands studying in Male' and staying away from home. • Children returning to their home island having been schooling in the capital. • Disabled children and children with special educational needs (SEN). • Children of disadvantaged families in remote locations with limited internet access. • Children of foreign immigrant workers (very few). • Pre-school and foundation years students without the capacity or support to engage effectively in remote learning.

DIMENSION	INDICATOR/QUESTION	INFORMATION
Education system structure	Brief description of the structure of the education system – federal or centralized	• Compulsory education lasts 10 years from age 6 to 16.[8] • Maldives has a centralized system with direct national policies. There are variations in policy implementation between Greater Male' (Capital and two satellite islands) and the rest of the country, specified in central MoE directives. • 82 per cent of student enrolment is in government schools, 12 per cent in private schools, 6 per cent in community schools.[9]
Pre-COVID-19 progress towards SDG4 indicators	School-aged population	22,797 pre-primary, 50,361 primary and 26,182 secondary
	GER and NER (2019)	Pre-primary • GER 86 per cent (88.8 female, 83.4 male) • NER 85.6 per cent (88.3 female, 83.1 male) Primary education • GER 98.04 per cent (99.34 female, 96.85 male) • NER 97.8 per cent (99.1 female, 96.7 male) Secondary education • GER 81.39 per cent (78.4 female, 84.27 male) • (NER no data)
	OOS children	1,009 (174 female, 835 male)
	OOS adolescents 2019	1,385
	Repetition rates (2019)	Primary 0 per cent
	Gross intake into the last year of primary	91.7 per cent (93.1 female, 90.3 male)
	Survival to the last grade in primary (2018)	94.2 per cent (94.9 female, 94.5 male)
	Transition rate from primary to lower secondary general education (2018)	99.2 per cent (98.5 female, 99.9 male)
	Literacy rates among 15–24-year-olds	98.8 per cent (99.1 female, 98.4 male)
	Pupil-teacher ratio in pre-primary and primary education (2019)	13.9

From the latest available UIS UNESCO statistics[10]
- The 2018 population of Maldives was 516,000, of whom 104,000 (20 per cent) were aged 14 or under, with a 2.9 per cent annual population growth.
- The population was 60 per cent rural, with total fertility rate of 1.9, infant mortality rate of 7 per 1,000 live births, and life expectancy at birth of 79 years.
- GDP per capita was 19.698 (PPP$), with annual GDP growth rate of 5.2 per cent. Total debit service stood at 7.1 per cent of GNI, and GDP at 10 billion PPP$.
- In 2019, government expenditure per student in PPP$ was 3,089.4 in primary education and 4,236.8 as initial government funding per secondary student.

01
Introduction

> Asia, with its huge population and many overcrowded cities, is potentially very vulnerable to COVID-19 which spreads through close contact with infected people.

1.1 Background

The global nature of the COVID-19 pandemic makes it different, affecting the whole world with the twin shocks of a health emergency and an economic recession. This will lead to long-term costs on human capital accumulation, development prospects and welfare.

The pandemic has affected all parts of the world and the responses to the situation have disproportionally affected the most vulnerable and marginalized members of society.

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. Markets, workshops, farms, and factories closed, leaving children and families stranded. For many, the fear and uncertainty continue. Some minorities find themselves stigmatized and accused of causing or spreading the pandemic. Deep rooted inequalities in societies are being exposed.

Asia, with its huge population and many overcrowded cities, is potentially very vulnerable to COVID-19 which spreads through close contact with infected people. The contexts within which people of South Asia, Southeast Asia and East Asia, are having to cope with the virus are vastly different, with a disparity in living conditions and varying degrees of access to and quality of essential services such as health and education. Across the continent there is vast inequality between the rich and poor and therefore different levels of resilience to the shocks that this disease has brought, putting the poor at long-term risk far beyond contracting the virus. This region regularly suffers from shocks which lead to localized learning interruptions. For example, during the pandemic, Bangladesh and India were in the path of a cyclone and recent floods have threatened communities, giving them a double shock.

This Situation Analysis has been undertaken as part of the broader analysis initiated by UNICEF and UNESCO to provide a snapshot at the educational responses and effects of COVID-19 across Asia. It considers the direct effects of school closures and reopening and identifies initial impact that this may have on learners, their families and on the education system as a whole. It aims to develop insight based on the variety of responses to the pandemic with a view to assessing their efficacy in Asia. It seeks to understand the contextual factors that may have supported or hindered learning, with particular attention on the most disadvantaged groups who will be most affected by the pandemic. For this, the analysis has the following objectives:

- To assess and estimate the various impacts of the COVID-19 epidemic on the education sector and stakeholders in Asia;
- To examine the policy and financial implications of progress towards achieving SDG4 (Education) by 2030;
- To identify examples of promising responses and strategies in education and associated social sectors, which can be shared with other countries.

The Situation Analysis identifies examples of effective country approaches which could be replicated or adapted for use in other countries. Following the development of the case studies (including this Maldives situation analysis), the overall study includes an overview of the situation in each of the three Asian sub-regions and finally the region.

1.2. Methodology

The case studies have been supported by the UNICEF and UNESCO offices in each country, which have provided information and assisted the researchers to contact relevant officials to collect country-specific documents, grey literature and data to tell the story of the COVID-19 journey across Asia, its impact and the responses of each education system.

In addition to a literature review, each case study involved interviews with key stakeholders (listed in Annex A) including government policymakers and implementers, UNICEF and UNESCO teams, and NGO representatives at local and central level. This provided an opportunity to hear more about the challenges faced and the responses developed, and offered a space for discussion of lessons learned and what still needs to be done.

A cross-cutting focus on the most vulnerable members of society, particularly highlighting girls and learners with disabilities, has been used across the assessment. The aim of this is to identify interventions which have successfully reached the most marginalized communities and how their different needs were addressed to increase accessibility and participation for all.

1.3. Structure of the case study

The case studies are structured in 4 sections. After this introduction and a country fact sheet, Chapter 2 discusses the effects of COVID-19 on the education system against four dimensions (Figure 2 below); challenges are identified and then the responses are set out against the three phases of school reopening (Figure 1 below) depending on the specific context of each case study country. Chapter 3 provides a 'deep dive' into a particular theme, which was identified in each country by the UNICEF and UNESCO country teams. Chapter 4 provides an overview of the lessons learned, providing specific recommendations for the case study country, as well as for other countries on building back better and increasing the resilience of the education system to future shocks.

FIGURE 1 | THREE PHASES OF SCHOOL REOPENING

1 Prior to reopening

2 Part of the reopening process

3 With schools reopened
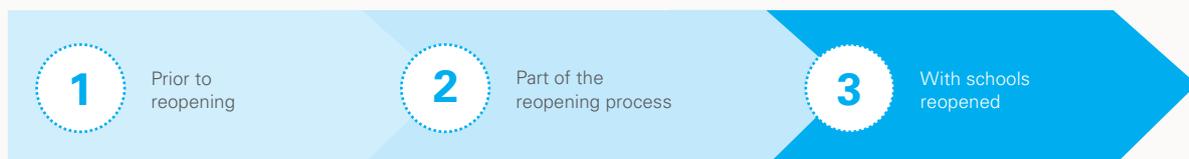
FIGURE 2 | FOUR DIMENSIONS OF ANALYSIS OF EFFECTS

Access to and participation in learning

Health, well-being and protection

Safe operations

Finances

02

Effects of and response to COVID-19 on the education sector in Maldives

2.1. Country background

The Republic of Maldives is a small island state in the Indian Ocean, southwest of Sri Lanka, about 700 km from the mainland of South Asia. Maldives is a nation of low-lying coral islands, comprising 22 natural atolls. Each atoll is a ring of islands which have grown on the rim of an extinct submerged volcano. They lie along a north-south line, approximately 650 km long and 130 km wide. About 200 of the approximately 1,190 islands are inhabited. The country is divided administratively into 20 Atolls[11] and is centrally run from the capital, Male'.

Maldives is sparsely populated overall, except in the capital. There are three other islands named as cities – Kulhudhuffushi (Haa Dhaal Atoll) in the north, Fuvahmulah (Gnaviayani Atoll) in the mid-south, and Addu (Seenu Atoll) in the far south – but Male' is distinctly more densely populated as well as being the seat of government and national institutions. This concentration means there are two very different faces to the country: Male' (now extended administratively to include two satellite islands as Greater Male') and 'the atolls' or the other islands.

"Prior to the pandemic, Maldives was tracking well for SDG4 Quality Education."[12]

The above quotation, whilst it goes on to add that there remained significant challenges to be worked on across the Sustainable Development Goals (SDGs), points to what will have been clear to any older Maldivian: education had become dramatically more available, across the many islands of the country, to all levels of society, and at higher quality, aligned increasingly with international standards, than had been imagined in the relatively recent past. In other words, education access, equity and quality were much improved.

This improvement went along with the growth of the economy, access to modern sanitation and clean drinking water supplies, electrification, telephone, television and internet access, regular and rapid intra-island transport, and many of the features of a modern, consumption-based life. However, along with these gains had come new pressures and difficulties in social, environmental and health domains. Human development inequalities (health, income and education indices) ranged from Human Development Index values of 0.627 (all Atolls excluding Male') to 0.734 (in Male').[13]

In 2019 the MoE and the Ministry of Higher Education had set out an Education Sector Plan (ESP) 2019–2023, supported by the Global Partnership for Education (GPE).[14] The ESP had four goals:

- **Goal 1:** Improved learning for all, through equitable access to quality education.
- **Goal 2:** Skills for Youth and Adults through equitable expansion of the technical and vocational education and training (TVET) programmes, responding to the socio-economic and development needs of the Maldives.
- **Goal 3:** Ensure equitable access to lifelong, affordable, and quality higher education for all.
- **Goal 4:** System strengthening for efficiency and quality schools and training services.

Goals 1 and 4 encompassed the MoE priority focus areas for school education.

This chapter briefly notes the effects of the COVID-19 pandemic on the education sector in Maldives, the response to COVID-19 in education management and participation, and the challenges faced by the education sector in formulating and implementing this response. The education response is expanded in Chapter 3, focussing on the use of distance education during school closures, with consideration of the extent to which this enabled or limited access and participation in education.

The consideration of response focusses mainly on Phase 2, with the country being in the reopening process at the time of writing. Brief description is made of the initial complete closure (Phase 1) and pointers towards the future situation with all schools reopened (Phase 3). Within the overall picture of the country being in Phase 2, the situation is composite, as some schools are open fully, others are closed fully (island schools outside Male' where there are cases or are no cases of COVID-19 in the vicinity, respectively), and some are partly open, partly closed (schools in Male'). The situation on opening and closing remains fluid, with instructions issued on a two-weekly rolling basis, to open schools (fully or for selected classes/grades) or to close them.

2.2. Effects of COVID-19 against the four dimensions

Maldives produced an Education Response Plan (ERP) for COVID-19 in May 2020. As the basis for laying out a detailed and budgeted response plan (referred to further below, under Education Sector Response), this document encapsulated a broad consideration of the background situation in Maldives, and of challenges, financial implications and impact of COVID-19 on the school education sector. In its background and analytic section (Part A), the ERP considered the potential impact of COVID-19 on the school education sector. Key points in this analysis are summarized against the dimensions.[15]

Access to and participation in learning

The immediate effect of COVID-19 on participation in learning was a complete interruption, as schools were closed and pupils were instructed to stay at home. This affected over 91,000 schoolchildren, from pre-kindergarten to Grade 12, and students with SEN.[16] At first, there were no alternatives or plans to support continuity of learning – schools were initially closed for just two weeks and it was hoped to reopen them after the mid-term break. However, this was reviewed and the closure extended.

With 82 per cent (74,806) of school students in Maldives attending government schools, the numbers of students in private schools (12 per cent – 11,173) and in community schools (6 per cent – 5,693) are relatively low.

However, especially for early childhood education, the private and community schools are a significant part of the whole, as 70 per cent (almost 8,000) of the students in private schools are in nursery and pre-school years; in community schools over 60 per cent (about 3,650) of students are in those early years.[17] Private and community schools are exposed to the risk of parents withholding fees or withdrawing their children, they do not receive government funding, and they faced closing down, being unable to pay their teachers. This would put an increased burden on government schools, especially with the need for social distancing within classrooms.

Early on in the pandemic, a series of decisions was taken in rapid succession, the overall effect of which was to shift the school education system to a contingency setting, with teaching continuing by remote means, utilizing TV, internet and informal social media/mobile phone network communications (Viber). While plans were made and operationalized to switch to remote learning, initial steps were affected when safety concerns caused the central TV production facilities and government offices to be closed abruptly, as Male' went into lockdown with the arrival of COVID-19 cases.[18] Although internet reach in Maldives is much wider than in many countries, and mobile networks and internet services reach every island, there are challenges in technological infrastructure and access to the internet. An MoE survey in March 2020 found that 31 per cent of the potential audience for the school education distance-learning programmes (students, teachers and parents) did not have internet or wifi access at home. Data was expensive, particularly when purchased as mobile data in the absence of a home internet connection. Teachers, students and parents were not well prepared to switch to teaching and learning by remote means. Students from Grade 3 upwards had recently been provided with Android tablets, but there was no stock of prepared materials or established designs for the use of these tablets in teaching and learning.

Low-achieving students may be from disadvantaged backgrounds, in remote islands, and served by lower performing schools. These students' likelihood of learning from home-based remote learning, especially that reliant on high-speed internet connections is very limited.[19]

In 2019, about 5 per cent (3,796) of students were identified as having special educational needs (SEN). A planned training programme for teachers and senior managers to improve support for students with SEN was suspended with the advent of the virus.[20] Despite this, support for learners with SEN was identified as a specific concern. Schools and the national MoE sought to continue support to students who were now home-based and unable to receive face-to-face teacher support, as far as possible with localized operational approaches. Steps taken by teachers included individualized video teaching, and emphasizing support to parents and caregivers to help them understand and encourage their child's learning as far as possible.

Public examinations, including IGCSE and lower Secondary School Certificate for Grade 10, and AS and A level for Grades 11 and 12, respectively, were initially postponed. This had potential effects on transition.[21] To mitigate this, an attempt was made to continue 'normal' education for those students due to transition from primary to secondary school, and for those due to sit international GCSE examinations or higher-level school-leaving examinations.

In July 2020, schools reopened in all islands except the three termed Greater Male', dependent on local cases of COVID-19. (Greater Male'[22] – the capital island and two satellite residential islands – is a single administrative unit, despite being divided by narrow sea channels.)[23] In Male', schools initially reopened then closed soon after – since then they have progressively and partially reopened, with some classes attending on campus (albeit with shorter school hours and fewer days each week).

The school curriculum was revisited and condensed for the present school year, streamlining the teaching and learning content to the essentials, in recognition of the learning loss and the expectation that the disruption to school attendance would continue for an extended period throughout the year.[24]

Impact on teachers

The MoE carried out a survey of government sector teachers to assess the impact of COVID-19 on them.[25] A Google form was sent for self-completion to all schools, and all teachers were invited to respond – 385 (109 female) government-sector teachers did so. The results of this survey were yet to be published and are unlikely to be statistically representative, but some points were commonly stated:

- 80 per cent said they missed the social contact with children when teaching from home.
- 65 per cent claimed a decline in their mental health and well-being.
- 65 per cent said their income had decreased substantially due to the pandemic.[26]

The last point was reinforced in the ERP[27] which identified that some teachers face reduced incomes; for those in the public sector a long-expected salary increase would probably be deferred because of financial strains on the wider economy and on the education system arising from COVID-19.

Some 22 per cent of teachers in Maldives schools are expatriates (mainly from India). The combined effects of income decline, anxieties about their families at home, feeling socially excluded as outsiders (as the virus comes from outside the country) and the availability of sponsored repatriation flights are likely to mean a proportion of these leave the islands where they have been working and return to Male' to seek repatriation. Some may return home at the end of the school term (at the start of December 2020) and will not return in 2021. This will affect schools' teaching capacity, especially in the senior grades, where many schools rely on expatriate teachers with higher levels of subject specialist expertise.[28]

When asked about improvements required in the education sector to respond to the pandemic:

- 73 per cent said the introduction of technology and other innovative solutions was required – far more than any other item.
- The next highest items were increased teaching autonomy (12 per cent) and greater cooperation from parents (9 per cent).

Safe operations

Existing inequities will widen.[29] Although overall Maldives has high levels of satisfactory provision of water, sanitation and hygiene (WASH) facilities,[30] the Maldives ERP for COVID-19 points out some challenges:

"Prior to the pandemic, in 2019, the MoE and UNICEF had identified 55 disadvantaged and underperforming schools out of 212 government schools. This is nearly 26 per cent of the government schools and accounted for approximately 10,000 students and over 2,000 staff, of whom 69 per cent were teachers. These schools have been noted to be "on a trajectory of underperformance" (QAD 2020). They lacked basic water, sanitation and hygiene (WASH) infrastructure, libraries, staff rooms and laboratories. Based on a situation assessment of the 55 schools (QAD and UNICEF 2019), a special project was designed and launched in early 2020, with several interventions to address the identified needs for physical upgrading, provision of basic teaching-learning resources, capacity building, and strategies for improving inclusion (QAD 2020). With strong advocacy from UNICEF, some of these schools received a modest allocation from the 2020 budget for Education, including funds for renovation and repair."[31]

The project launched early 2020 to address these issues was interrupted by the pandemic.

The budget allocated in the ERP[32] to address these WASH needs, including constructing and upgrading WASH facilities in the 55 identified schools which was planned for under the interrupted project, was $1,212,205.[33]

The cost of sustaining the safe operation of schools was substantial. The austerity measures taken by the government resulted in the MoE's annual budget being reduced as well, requiring additional funds for safe reopening of schools. The funding gaps were partly mitigated by support from UNICEF, especially to put in place infection prevention and control measures in schools.[34] Budget deficits in 2021 from the sharp decline in the economy resulting from the pandemic will probably suspend or reduce planned improvement efforts.[35]

Health, well-being and protection

Children in lockdown could not be seen face-to-face by teachers and supported at school daily. This poses concerns for vulnerable children – some children may suffer fear and anxiety arising from the pandemic and teachers will be less able to identify and support them due to being physically distant. This is particularly true for children with SEN. From the MoE teacher survey,[36] among the 91 respondent teachers (72 female) responsible for teaching students with special educational needs:

- 36 per cent said that the pandemic had severely or very severely affected the mental health of these students.
- 65 per cent responded that the pandemic had severely or very severely affected the learning of these students.
- 22 per cent said the pandemic had severely or very severely affected the supply of students' special food.
- 44 per cent said the pandemic had severely or very severely affected students' therapy.

Perhaps more significantly, among the teachers who responded:

- 72 per cent indicated that no student had contacted them to seek assistance.
- Of the approaches by students seeking (non-academic) help from their teacher, half (48 per cent) were classified as being due to stress, and stress, mental well-being and personal psychosocial support together accounted for 95 per cent of approaches. The remaining few approaches concerned fear of dying (3 per cent) or being bullied at home (2 per cent).

Since Maldives is a state of many islands, many young people from other islands lodge with family or others in Male' to attend school. With transport between islands suspended entirely or reopened only sporadically and partially, there is concern that these young people have reduced access to support from their island-based family in case of need.[37] In Male', housing is typically high-density and living conditions are crowded. This poses a risk for COVID-19 transmission. During lockdown, leaving the house for essential purposes was limited by permit, so many students were unable to leave their accommodation. The situation on other islands varies: whilst some have very crowded living conditions, the majority have far more open space than in Male', and also less restriction on movement within the island itself, even though inter-island movement is banned. If large numbers of students return to their home islands from Male' in response to COVID-19 and school closure, this will deplete the income of Male' private schools (and one large community school) and place extra strain on island public schools.

The ERP[38] recognized that:

- The suspension of the breakfast programme (a nationwide programme from 2019, valued at $1.4 million per month) will be detrimental to the nutrition of the neediest, in a country with almost one in five children already identified as being stunted.
- Students risk becoming demotivated during school closure and dropping out, with a rise in out-of-school children (already noted as an issue in the MoE's 2019 Education Sector Analysis). Disengagement from school has social effects including association with a rise in criminality and exposure to abuse.
- Early childhood education and foundational learning are likely to be particularly affected. Older children's education will be prioritized by households and the education system during school closure. Parents and caregivers are unprepared for taking on the role of full-time carers able to support the socio-emotional development of their children and to help them develop the skills which provide the basis for later learning.

Finance

The financial impact of COVID-19 has been nationally significant. A rapid assessment by the Ministry of Economic Development in August 2020 projected a fall in GDP for 2020 of 11.5–29.7 per cent; the World Bank projected a fall of 8.5–13 per cent and the Asian Development Bank estimated a fall of 1.4–4.1 per cent.[39] The tourism sector, which in 2019 made up 26 per cent of the economy, was heavily affected. Maldives closed its international borders and limited intra-island travel, with restrictions progressively introduced from mid-March 2020. Hotels and guesthouses were closed. The second largest sector, transport and communications (13 per cent in 2019), was also highly exposed and projected to suffer major contraction.

On 20 March 2020, the government launched an Economic Recovery Plan of $162 million (2.5 billion rufiyaa) to support businesses and individuals severely affected by the crisis.[40] Economic relief packages were included in the plan for large, medium, small and micro enterprises, the self-employed and employees. From March 2020, all individuals and employees benefited from subsidized electricity and

water.[41] This was followed in due course by a budget for 2021 of 34.8 billion rufiyaa presented by the Minister of Finance in November 2020.[42]

Various funding bodies contributed funds to support Maldives in response to the COVID-19 crisis:

- The World Bank announced fast-track funding of $7.3 million as a COVID-19 Emergency Response and Health Systems Preparedness Project, and an additional $10 million for contingency financing (under Disaster Risk Management Development Policy Financing). A Catastrophe Deferred Drawdown Option, signed in 2019, was also made available.[43]
- The EU provided EUR 3 million grant-aid support (1 million for the health sector, 2 million to the tourism sector),[44] the Asian Development Bank contributed grants totalling $600,000.[45] The OPEC Fund for International Development pledged $20 million loan assistance,[46] and $178 million was secured through a currency swap with India ($150 million) and from the International Monetary Fund (IMF) ($28.9 million).

The Maldives Monetary Authority strove to stabilize the economy and the national currency (Maldivian rufiyaa) by increasing the issue of foreign exchange to the foreign exchange market via banks and arranging to provide foreign currency to banks. Maldives' central bank had reserves of $741.4 million at the end of March 2020, and $882.6 million by 27 April 2020.[47] The government also provided unemployment allowance to people losing their jobs as a result of the pandemic.[48]

In an International Labour Organization briefing updated 30 April 2020, Maldives' GDP growth was projected to face a loss of revenue of $168–448 million. As a result, the Maldives was said to be facing a serious shortfall in foreign currency earnings, estimated to be $450 million. The state budget passed for 2020 was expected show a deficit of approximately $779 million.[49]

When remote learning first began, a data allowance was provided to all students/parents and teachers, to assist with accessing the internet. This was a short-term measure, and was soon found to be insufficient. More sustainable means of making online access affordable was identified as a challenge to be addressed for the longer term.

There were two main strategies used to continue participation in learning during lockdown – broadcasting lessons (Telikilaas) on public TV channels to a fixed timetable, and using Google's Suite of programmes (including Google Classroom and Google Meet).

2.3. Education sector response to COVID-19 and supporting continuity of learning

To map out a way forward, the MoE (supported by UNICEF and with funding from GPE) produced the Education Response Plan[50] of May 2020. This has been subject to regular monitoring and reporting, with financial reporting against budget and narrative reporting of summary headlines in UNICEF South Asia Region's periodic updates.[51]

Response to COVID-19 noted in the ERP

The ERP Part B set as the overall goal of the plan:

"To minimize the loss of learning for students, while simultaneously preventing the spread of COVID-19 from schools into local communities, by providing safe learning environments, and by putting in place appropriate prevention measures in the schools, and conducting awareness activities as per the Health Protection Agency (HPA) guidelines.[52]"

Within this, the ERP set out to:

- Guarantee equal access to learning
- Plan for inclusive learning strategies
- Address the digital divide
- Encourage outreach and support
- Empower teachers to meet students' needs.

Dimensions for interventions and key subsidiary components were:

- **Safety**
  » Intensify awareness of handwashing and other measures
  » Conduct a 'new back to normal' campaign
  » Develop easily understandable guidelines and standard operating procedures (SOPs)
  » Support preparedness for return to school, with psychological and pedagogical support

- **Continuity of learning**
  » Continuity during lockdown, but remote learning
  » Resumption of learning when schools reopen, with phased reopening
  » Compression of the school curriculum
  » Create a digital repository of learning materials and lessons
  » Capacity building at school level, training all teachers in online/blended methods
  » Improve connectivity
  » Expand pre-service training
  » Seek additional staff
  » Customize the MEMIS for COVID-19

- **Support the most vulnerable**
  » Provide safety assurance and psychological support to learners, teachers and parents
  » Conduct separate handwashing awareness campaigns for children with SEN
  » Protection and well-being
  » Address the stress felt by teachers in the pandemic
  » Ensure teachers are paid regularly and that their income is not affected
  » Obtain flexible working arrangements for teachers
  » Update standard operating procedures (SOPs) and disseminate school emergency operational plans (SEOPs) for schools

- Building resilience and strengthening coordination
  - » Incorporate remote learning for school closure into the information and communications technology (ICT) master plan[53] being finalized
  - » Increase local capability in crisis-sensitive planning
  - » Strengthen data collection and dissemination through MEMIS
  - » Embark on knowledge management and research including on children and families returning home to their islands from Male' during the crisis and vice versa

The ERP for COVID-19 sees the ICT master plan as essential to continue the development of the use of ICT. An indicative budget of $48,000 is allocated to support it, and a unit would be established to facilitate implementation. Data collection and dissemination would be strengthened through MEMIS. This would include streamlining processes in schools and units of the MoE, ensuring accuracy and verification of data, and disaggregating data to identify gender, SEN and disability. The plan would also include establishing a cost-effective and sustainable virtual learning solution, to ensure continuity of learning in future emergencies and crises.[54]

Phase 1 - Prior to reopening

Access to and participation in learning

When schools were closed in response to the pandemic, the education system was not prepared for remote teaching. There were, however, elements already in place which had potential to be developed rapidly, and efforts were made to adjust quickly to maintain access to and participation in learning.

There were two main strategies used to continue participation in learning during lockdown – broadcasting lessons (Telikilaas) on public TV channels to a fixed timetable, and using Google's Suite of programmes (including Google Classroom and Google Meet).[55] Components of Google Suite have been used for classes, homework and communications between teachers and students, and among students. Google classes were planned, prepared and used by individual teachers for their own school and class. Telikilaas programmes have been developed, produced and broadcast for all school grades up to Grade 12. As well as being broadcast on public service

TV national channels following a timetable published weekly, lessons were also available for asynchronous streaming or download from a web portal (Filaa). The Filaa portal was populated progressively with lessons and materials developed for Telikilaas.[56] Initially these Telikilaas lessons were produced centrally. Subsequently they were produced by teachers around the country, with quality being assured by coordinating centres: those deemed satisfactory were uploaded for nationwide access.

The use of Telikilaas and Google tools to enable continuation of learning during school closure, and in complement with face-to-face teaching following school reopening, was laid out in a Circular[57] and accompanying detailed note[58] on 14 May 2020. This is considered further in Chapter 3.

Safe operations

SOPs for use in response to COVID-19 were introduced with the production and distribution of a four-page document by MoE in March 2020.[59] The document set out how MoE and schools were to respond and communicate during different risk levels for COVID-19 outlined by the HPA. Four levels of risk were outlined. For each level, responsibilities were indicated for MoE, schools, the Educational Supervision and Quality Improvement Division (ESQID) of MoE, and the HPA.

From Alert Level 1, which comprised precautionary and pre-emptive health, hygiene and management practices to be followed prior to any outbreak, the school education sector jumped rapidly to Alert Level 4, where all schools were closed nationwide, by decision of the Minister of Education.

Alert Level 2 involved limiting internal and international travel, cancelling multi-island trainings, heightened care and notifications of any infections. Alert Level 3 included closing schools in affected islands and zones, and liaising to make alternative learning arrangements for schools which had been closed down.

The SOP gives step-by-step instructions on communications, isolation and making arrangements for an individual student to study by home-schooling, for cases where a student or staff member had come into contact with a suspected case of COVID-19.

Community participation

There is no formal community engagement in mainstream education in the public school system. However, individual schools liaise with parents and caregivers to try to create conditions conducive to their children's learning, and to disseminate information and understanding of education, health and well-being. There are also community-run and private schools.

During school closure, schools were encouraged to engage with parents, to help the parents support the students' home-based learning. The aim was to ease the anxieties of both parents and students, and to gain a sense of whether students were facing any welfare issues.

Health and well-being

Under the heading of protection and well-being, which includes health and overlaps with safety, in Phase 1 (before reopening), MoE:

- Coordinated with schools to support activities for the mental well-being of students, encouraging them to learn new skills (such as drawing and writing poems), helping parents at home and encouraging boys to share domestic work.
- Planned to review existing SOPs and update them as SEOPs.
- Planned to print and distribute SEOPs to all schools.
- Planned to stockpile first-aid kits, disinfectants, masks, menstrual hygiene management materials and other materials, ensuring access to the most marginalized communities.

In Phase 2 (during school re-opening), MoE:

- Conducted risk assessment for teachers and other staff, then implemented a staggered approach to return to school.
- Reviewed and strengthened referral systems, seeking to ensure providers are aware of other care services. This includes including services to prevent gender-based violence and sexual exploitation and abuse, and sexual and reproductive health services.[60]

Finances

The 2020–2021 budget for the ERP totalled $22,907,765 (Table 1 shows a breakdown).[61] This budget was used on a rolling management basis as activities were undertaken, with periodic updates.

TABLE 1 | EDUCATION RESPONSE PLAN BUDGET COMPONENTS

Safety	16,991,978
Continuity of learning	5,200,362
Reaching the vulnerable	448,466
Protection and well-being	6,600
Building resilience and strengthening coordination	260,360
Total	**22,907,766**

As schools began to reopen, some schools adopted operating shifts to reduce the number of children on site and to practise social distancing more feasibly with desks spaced out in the classroom.

Education system

The education system responded to COVID-19 in line with the ERP, the details of which have been noted in previous sections. These matters and others are considered further in Chapter 3.

Phase 2: Part of the reopening process

Access to and participation in learning

As schools began to reopen, some schools adopted operating shifts to reduce the number of children on site and to practise social distancing more feasibly with desks spaced out in the classroom. Although government policy had been for schools to move away from using shifts, some schools lacked the physical space for all students to attend at the same time while paying due attention to social distancing.

Additionally:

- Schools had reduced days per week: one day was allocated for teachers' preparation and planning; four days were allocated for classes; there is a two-day weekend in Maldives. How the time was allocated varied from school to school. This is discussed below.
- Class hours within each day were also reduced, to allow time for hygiene, safe movement, announcements and checks.
- Schools are set to continue on a condensed curriculum for the remainder of this school year.
- Arrangements for student assessment have been revisited: teachers were instructed by MoE to use tests and assessment solely to assist learning, not to grade students summatively based on marks gained

in remote assignments during school closure (or when schools are reopened and continuing to use digital communications). Participation in public International General Certificate of Secondary Education (IGCSE) examinations and AS Level examinations was cancelled.

On islands currently free of COVID-19 and with schools opened, teachers and students continued to use Telikilaas and Google Classroom alongside face-to-face teaching and learning. This was anticipated to remain the case in the future and is included in the ERP for the post-COVID-19 period.

"Even after the COVID-19 emergency is over, the MoE will consider running all schools two days a month via online/video conferencing, supported by Telikilaas."[62]

This matter of how the use of the newly adopted digital communications, learning platforms and broadcast television programmes would be combined with traditional face-to-face teacher-student interaction in the future was further detailed in a Circular and accompanying guidance note published by MoE, dated 13 June 2020.[63]

- The guidance note gave advice on the preparations to be taken for school reopening and some broad pointers towards the desired approach once schools have fully reopened. In some schools, teachers have expressed enthusiasm for the new technologies as tools which they can use when students are in the classroom as well as when they are studying remotely. For example, in some schools, pupils studying remotely in Google Meet have also used their tablets in face-to-face classes with the teacher, and their exercises and homework are all handled electronically, whether submitted as work done in the classroom or from home.[64]

Safe operations

A range of steps to address the need for safe operations was put in place when schools started reopening. These measures were directed from central MoE, and interpreted and operationalized by the individual school. Figure 3 gives an illustrated example of this in practice.

- New SOPs were followed, as noted above.[65]
- Guidance on handwashing was provided to students, staff, parents and caregivers. This included videos embedded in Telikilaas lessons.
- Hygiene procedures were incorporated into school timetables and procedures.
- The temperature was taken of students, staff and any other person on arrival at school.

- The use of face masks was instituted, in some cases including within class.
- Different schools adopted different approaches to reducing congestion: staggered class times, or having students on campus in shifts, or on alternate days.
- There was a change from homework handed in and marked on paper to electronic submission, marking and feedback. Even where the work is handwritten, schools adopted procedures where a photograph is submitted and feedback is given by the teacher electronically (in some cases annotating the photograph of the script).
- School canteens closed, and all students were told to bring their own food and refreshments from home.

FIGURE 3 | AN EXAMPLE OF A SCHOOL'S SAFETY PROCEDURES ON REOPENING

When the Gnaviyani Atoll Education Centre partially reopened (students continued to do some of their classes from home, online), the following rules were in place when students were on campus. These rules are expected to remain in place when the school has fully reopened.

A minimum of three feet (one metre) social distance is expected. Students could sit slightly closer if wearing masks. Students wear masks in class. The floor is marked to show the social distance. The teacher may not walk around class, or touch students or objects. Students may not sit facing each other. Students must bring their own food (they used to be given breakfast in school, but this stopped due to COVID-19).

Using apparatus, students keep distance from one another. Using apparatus, it is assumed the teachers make sure students disinfect items they handle.

Each student's temperature is taken every day on arrival at school. Students sanitize their hands before they enter school and when going home. Restrictions are in place on moving around school, monitored by teachers.

Cotton facemasks were provided at the start of the pandemic for students to wash and wear.

Timekeeping is strict. More time is needed for transactions and health-related matters than had been the case before COVID-19.

There are no sports at school, due to COVID-19. Before the pandemic, the school had an hour of sport before school (06.00-07.00) on three days a week, followed by sessions from 08.00, from KS3 upwards (Grades 7 and 8).

MoE keeps reminding teachers to speak to students about stress. The school's senior management team continues posting informational messages in the school parents' group. Mental health messages are also posted in the parents' group, and in class groups. Counselling is available.

Community participation

The Telikilaas TV broadcasts are transmitted on free-to-air national TV channels. Public service information is disseminated on public TV channels, and on YouTube and the MoE Facebook page, to advertise and encourage the students to watch the programmes, and to encourage the parents and caregivers to support the children and young people to do so.

Some Telekilaas programmes are directed specifically at parents, to encourage them to support their children's learning during school closure. In some schools, parents and caregivers are asked to confirm that the student in their household has watched the Telikilaas broadcast scheduled for that student's attention after each episode by responding to a text message in Viber, sent by the school. The school treats the responses as a proxy attendance register. However, there is an awareness that a parent responding effectively with a tick that their child watched a TV programme is of limited value or reliability – it tells the teacher nothing about the level of engagement or whether the child learned anything. Thus, teachers were advised by MoE to call to speak directly to the student, or to the parent, to maintain contact and interaction. From discussions held, many teachers evidently do so.[66]

Phase 3 - With schools reopened

Phase 3 had not been fully achieved at the time of undertaking this study. While some schools had reopened from July 2020 onwards in the islands other than Male', this was not yet established as 'the new normal'. Schools remained subject to closure according to local conditions. However, the MoE had produced guidance on how to proceed once schools were reopened.

The school system operated at different stages in different locations: schools in Male' remained closed for lower grades, opening for higher grades, while schools in the islands moved to open mode by default.

2.4. Main challenges faced by the education sector that influenced their response

Maldives does not face the same challenges as many other countries in some respects, as its culture and administrative structure is less complex than others in the region.

- It is a homogeneous country in terms of language and culture. All Maldivians speak Dhivehi as their mother tongue.
- Especially among the younger generation, English has become progressively established and used as the language of choice. Children generally have good levels of English, which enables the use of imported learning resources.
- In terms of communications infrastructure, there is good internet and telecommunications coverage throughout the country to main centres (although internet connectivity to many relies on expensive mobile data).
- The island geography makes isolation and control of disease transmission easier (though this does not apply within individual islands, and in particular the very densely populated capital). Outside Male', most islands have healthy amounts of open space and fresh air, albeit housing itself may be crowded.

- The centralized government and education system, and the small population and institutional sizes make changes relatively swift to decide, communicate and implement.

Nevertheless, there are challenges which have posed serious problems and which, although recognized and partially addressed, have not yet been fully overcome.

Unpreparedness for school closure

There was no plan for the continuation of education in the event of school closure. It was by good fortune that, shortly before the arrival of COVID-19, the government had provided schools and pupils with tablets, had adopted software and set up training in its use. The aim was simply to develop the use of digitally mediated teaching, learning and administration methods to complement classroom teaching.

Schools were not prepared to teach and support learners remotely; teachers and management, learners and parents/caregivers had to adapt without notice to a radically different mode interaction.

The studio which produced Telikilaas lessons had to close because of the pandemic, which meant that teachers around the country (without experience, training or equipment) were charged with designing, preparing and producing the TV programmes.

Remote learning limitations

Teaching and learning from TV programmes involves skills and procedures which differ from the familiar classroom processes. There are benefits of recorded video lessons which may represent advantages compared to the face-to-face lesson which some students would have received: the teaching and communication may be better planned and executed, the video can combine elements of demonstration, illustration and explanation, and signing for deaf students may also be included. However, much of the teaching support which is part of a good, interactive classroom lesson is lost, and the dynamic and opportunity for questions, adjustments and feedback between the teacher and individual is missing.

The studio which produced Telikilaas lessons had to close because of the pandemic, which meant that teachers around the country (without experience, training or equipment) were charged with designing, preparing and producing the TV programmes. They rose to this challenge and have produced a range of materials which are available to those with suitable internet connection through the Filaa website. Selected programmes are broadcast on nationwide TV to a weekly timetable set by the central MoE and published each week.

Technical challenges associated with adopting online teaching and learning included connectivity, the cost of data, and the quality of available and newly made online learning materials. There were limitations in providing support to remote learners, as teachers had little experience or technical expertise in teaching online, monitoring and assessing students' work, and providing psychosocial support.

Ensuring inclusive and equitable learning during school closures

Institutional capacity of DOIE: The Department of Inclusive Education is a small unit, newly established away from its former parent body, the National Institute of Education (NIE). It has a small (though professional and committed) staff of four and a departing senior head with extensive experience. But it lacks the administrative, finance and operational support which it enjoyed as part of a larger institution.[67]

Geographical distribution: Learners and schools are spread across many islands, and the conditions on more remote islands differ markedly from conditions in Male'. Developing and supporting education provision uniformly across the country is therefore a challenge. Although telecommunications infrastructure and access is relatively good in most areas, some learners in more remote islands do not have access to a suitable internet connection and device that will allow sufficient mobile data to be downloaded.

Supporting learners with special educational needs: One size does not fit all, and there are limited broadcast timetable slots in Telikilaas to cover diverse SEN, learning profiles and disabilities. Also, there is considerable difficulty in effectively teaching children with SEN remotely – in many cases very close interaction and assistance are needed, and sensory communication is tailored to compensate for limitations in one-to-one settings or with peer support in a classroom. Teachers may need to direct a substantial amount of effort to supporting parents or caregivers of learners, to develop the caregivers' ability and understanding of how to assist the learner, in addition to the effort the teachers devote to teaching and supporting the students directly.

03

Thematic deep dive: Access and participation in learning – provision of distance education

Maldives adopted distance education as a response to the necessity to close schools in the face of COVID-19's arrival in the country. This study seeks briefly to explore the experience and perceptions of this shift and capture some observations which may be of value to Maldives and other countries.

3.1. The challenge

The challenge on which this case study focusses is ensuring continuation of learning during school closure – seeking to ensure access to and participation in learning for all schoolchildren throughout Maldives.

This chapter looks at the adoption of distance learning in response to COVID-19, with consideration of how this has enabled schools and pupils to continue the teaching and learning process during school closure and as schools reopen.

Maldives adopted distance education as a response to the necessity to close schools in the face of COVID-19's arrival in the country. This study seeks briefly to explore the experience and perceptions of this shift and capture some observations which may be of value to Maldives and other countries.

The theme for Maldives was selected by MoE in discussion with UNICEF as: Access and participation in learning – provision of distance education.

Under this broad heading, areas were identified and expanded. The expanded thematic coverage was developed by Cambridge Education and reviewed and agreed by UNICEF Maldives Country Office in consultation with MoE. The four main areas were:

1. **System readiness:** Prior to the school closure, what capacity was there in Maldives for the school education system to switch from the conventional classroom-based model to continuation with students at home, using distance learning methods?

2. **Quality of provision:** Once the school education system moved to distance learning, how appropriate and effective were the materials and services to enable students to continue learning?

3. **Learning:** The learning and experience of students, and of teachers and others, will have changed through the adoption of a remote learning approach. From the documentary evidence and the perceptions of stakeholders and institutions involved, what can be noted regarding changes in the learning that has been achieved and about the process of achieving it?

4. **Conclusions and way forward:** While the duration and legacy of the COVID-19 pandemic is not yet known, it is acknowledged that even once schools are fully reopened, there may be a reversal to shut-down, requiring a return to remote learning. The future pattern of education may be changed into more hybrid models, including blended learning and self-access to digital resources along with traditional classroom teaching becoming part of the mainstream in some locations. What observations and learnings from the experience to date can be captured as pointers to the future, based on available documents and perceptions?

3.2. The response

The government was quick to consider and quick to act in response to COVID-19: the curriculum was condensed and circulated; examinations were cancelled; and teachers were instructed that their marking of students' work would be solely for formative feedback, not for summative assessment or grading. The response to the challenge has been to adopt remote (distance) learning as the key strategy to continue learning.

The two major strands of effort for continuing participation in education have been first, the creation and use of Telikilaas TV broadcasts, and second, the use of various components of Google's suite of software to carry out direct teaching by a teacher specifically at their own class and students within the teacher's school.

Preparation and communication

A series of MoE circulars and accompanying guidance notes was produced and distributed to schools as the situation evolved and the MoE and the government as a whole developed plans and responded to the rapidly changing context of the pandemic. In a circular dated 12 March 2020, staff were told to prepare to teach digitally in case schools remained closed after the midterm break. Approved digital platforms were listed (Google Classroom, TED-ED, YouTube, EduPage) and teaching was to be conducted only for Grade 10 and students preparing for the imminent AS level examinations. Hygiene and social distancing were to be stressed, and parents and students should be kept informed of the school's plans.[68]

A circular dated 16 March 2020 laid out advice to schools on the use of Telikilaas and digital learning platforms (listing Google Classroom, Google Meet, YouTube, Google Drive, EduPage, TED-Ed, Moodle, Filaa 'or any other digital learning platform approved by the MoE'), and support to give to parents and students to check on engagement, clarify students' doubts in relation to the learning (using the digital platforms for communication and teaching), and to consider using sign language and subtitles.

A concise summary timeline of initial key measures and responses by the MoE between February and April 2020 (with projection for May) forms Annex 3 of the Education Response Plan.[69] A timeline of events related to the COVID-19 crisis in Maldives more widely is included in the Rapid Livelihood Assessment carried out by the government.[70]

Approaches for remote learning across grades

The 16 March circular also stated that Telikilaas lessons, produced by MoE, would be for Key Stage 4 (Grades 9–12), while for KS2–3 (Grades 4–8), lessons were to be prepared by teachers based on the condensed curriculum and delivered by teachers using the digital platform. For KS1 (Grades 1–3) and Foundations (Pre-school and kindergarten), centrally produced numeracy and literacy materials, and play-based activity packs, respectively, would be provided: the KS1 to be disseminated by digital learning platforms, the Foundations material to be shared with parents for parents to use at home with their children.[71]

Provision of devices and data

In the months before the COVID-19 pandemic, as part of an existing plan, computer touch-screen tablets had been provided to all schoolchildren from P3 upwards. These tablets were locked, with online access restricted to legitimate sites and communications approved by MoE. They were not enabled for open internet browsing. These tablets became an essential tool in the adoption of Google Classroom.

The ERP action plan included the provision of tablets also to KS1 (Grade 1 and 2) students, and to students with SEN. It also included the provision of internet dongles to facilitators and to students identified as low-income or otherwise vulnerable.[72]

In response to the new need for online access, the government provided a free data allowance for use in remote learning (for Google Class and supporting communications by Viber). The allowance was 5GB per month for each student, and 10GB per month for each teacher. Teachers in interviews consistently commented that this was insufficient, both for teachers and for parents and students.

Production of materials and teacher development

Initially, Telikilaas lessons were centrally produced. Later, when the central production unit had to close with general lockdown, the development of lessons was devolved to schools around the country to produce the videos. Quality assurance was established by a review committee system, following which approved lessons were made available for national broadcast.

Telikilaas lessons, student worksheets and student notes, and a small number of teacher guideline documents were uploaded to a MoE portal, Filaa.[73] Filaa enables teachers (and students and any other interested person) to search resource materials by grade, subject and school of original production. Resources also include individual education plan (IEP)-based lessons.[74] In addition to the menu of recorded Telikilaas lessons approved for wider distribution, Filaa has teacher guidance on aspects of the use of Google Classroom (e.g., how to submit assignments in Google Forms, in Google Docs, as Google Slides, and as PDF documents).

Coaching was given to teachers to improve the quality of the Telikilaas TV programmes they record. A guidance note was prepared and circulated, and tips were given on how teachers could make an effective video recording, using a mobile phone and no studio facilities or special microphones.[75]

Teachers were trained as Google Classroom teachers/ Google Suite users. This provision had been in situ before, and was given renewed emphasis with the onset of the pandemic. Whilst all teachers were mandated and had been advised by central MoE policy to become familiar with the technology, the effective uptake had varied until the arrival of the COVID-19 closures provided the clear necessity to engage fully. Google Suite now became not just an additional tool to their main classroom teaching but its essential medium. In some schools, all teachers achieved Google Suite user certification.

In addition to certification as Google Suite users, a cohort of teachers was trained and certified as instructors in Google Suite, to serve as developers and resource people and to support others in the effective adoption of the remote learning technology.[76]

The ERP action plan and budget included an ambitious set of activities in this connection. In addition to the training on using Google Suite and on preparing Telikilaas lessons, there were plans for training of coordinators at NIE and at Atoll-based Teaching Resource Centres (TRCs)[77] on methods and theory of distance-learning pedagogy and assessment; for training teachers in supporting students with SEN; and for training teachers in providing psychosocial support to students and parents.

There were also plans for NIE and the TRCs to develop, print and distribute to parents guides in English and Dhivehi on how to support home-based learning and how to provide enabling learning environments to balance studying and domestic work by children. Further plans were to print and distribute copies of learning materials for Foundation-level students who could not access the internet.[78]

Arrangements were made with Cambridge University Press, the owner of the IGCSE (International General Certificate of Secondary Education) examinations taken by Grade 10 students, to provide free access to digital editions of the relevant textbooks for the duration of the COVID-19 crisis. The textbooks can be downloaded to the Android tablet or other device and used offline.[79]

Innovation and sharing

Other schools adopted different combinations of online tools as teaching and learning resources, and different teaching strategies in response to the COVID-19 disruption. Some of these were showcased by individual schools in a virtual conference organized by the NIE in November 2020.[80]

The NIE Innovation Conference, 'Education during crisis: forging a path to quality learning' was an opportunity for schools to share the best of their innovative responses to the COVID-19 challenge and showcase how they had achieved continuing provision of quality education. Schools competed with their presentations, and prizes were awarded at the close of the conference. Presentations were posted online on Dhivehi Channel, for viewing live or as recordings.

For example, Thaajuddin School in Male' used a range of software for teaching mathematics online during school closure, including Google Forms, Whiteboard.fi, Canvas, Quiz, Mentimeter and Cahoot;[81] and Seenu Atoll School had developed a guidance video for parents on how to use simple items from around the home or island environment as learning aids.[82]

Curriculum and assessment

As mentioned, the curriculum was rapidly reviewed and condensed to a limited 'core' of essentials for the current school year, to fit within the limitations imposed by an anticipated extended period of disruption to school attendance.

A student and school records management tool was adopted by MoE for use within the school: EduPage (EduPage is part of a timetabling software package, ascTimetables).[83] Every school had its $99 annual licence fee for EduPage paid by the government.

Uptake and usage of EduPage has been uneven. The software was advocated by an educational technology pioneer school, Shaviyani AEC, and formerly Haa Alif AEC (two regional schools in the far north of the country), which benefited from having a Principal with competence and enthusiasm for IT. EduPage was introduced in Haa Alif AEC in 2014. The Principal was later brought into the MEMIS consultation by MoE in relation to government discussions with technical assistance on Open EMIS from Community Systems Foundation. Since January 2018, all government schools have had a licenced copy of EduPage. Most schools use the software to generate their school timetables, but not its many other functions and capabilities. EduPage is being explored to different extents at different schools. One government school, the Atoll Education Centre in Gnaviyani Atoll, took the lead in developing the use of EduPage.[84] On the basis of discussions held, and in the absence of contrary evidence in the documentation seen, its use elsewhere is generally less developed and established.[85]

The EduPage system is for school-level records on individual and class progress, including student attendance, homework submissions, and marks awarded by the teacher. EduPage data can be aggregated by school management. EduPage also enables teachers to seek cover by another teacher if the scheduled teacher plans to be absent and allows the school Principal or other authorized manager to reassign classes to other teaches required. EduPage comprises a range of modules, which schools can learn and decide to adopt piecemeal, to provide a comprehensive records system for the school. However, EduPage is not integrated with the national MEMIS. MEMIS data are compiled separately, and the system is managed and used by central MoE rather than for routine management and academic records within a school.

EduPage also has the facility to import material such as published standards, indicators, curricula and schemes of work, and to allow teachers to map their lesson plans against these. This can be used for monitoring progress through the school year. It has a live classroom conferencing facility which could be used as a substitute for Google Meet. It has been suggested it could fulfil all the required functions of Google Classroom and Google Suite. At present, however, from discussions held it is clear that the emphasis nationwide is on the Google packages, with EduPage being used more for administrative record-keeping. As with Google Classroom, the administrator (e.g. school Principal) can see the progress of each class and student, and the teachers' and students' performance, attendance and timekeeping. Teachers are using Google Meet to hold classes and Google Classroom to set and receive homework, keep registers and note grades.

The methods used vary – some teachers have used Google Docs for homework and commenting; some students write by hand in exercise books and submit photographs of their assignments as attachments, which the teacher then annotates with stylus and returns.

Add-ons to complement Google Suite, such as PearDeck slide presentation software, have been used ad hoc by individual teachers to enhance their online teaching. PearDeck enables a teacher to engage the class in live interactive polls on questions as the class progresses, and the teacher can respond orally in response to the feedback gained from the polls.[86]

Male' schools reopened after the initial closure but closed again abruptly after two weeks, because of an increase of COVID-19 infections nationally and parents' reluctance to send their children back to school.

3.3. Analysing the response

This section considers the education response critically, including the extent to which the strategy adopted has been inclusive of all students. As well as documentation, it draws on interviews carried out in the course of this study.

What children lose by switching to distance learning

The education response in Maldives is to be considered in light of the wider understanding of issues commonly associated with distance learning, particularly for children, and how these can be mitigated by careful design of the distance learning programme or by adoption of a blended approach (a combination of face-to-face and distance learning).

Schooling is usually expected to support socialization and to engender well-being. It also provides an environment where skills can be acquired that depend on group work, collaboration and negotiation with others. School-based education also includes wider, non-academic benefits in the development of intra-personal and interpersonal skills, and can be a key instrument in social cohesion and peacebuilding, health and protection, mental health and psychosocial support (MHPSS), and sex education. All of these aspects need to be considered when designing or adopting plans for blended models of education that rely on both face-to-face and distance learning. Steps are needed to mitigate the loss of these aspects of education and personal development which are normally available in a physical school setting alongside peers and through direct interaction with teachers.

Access to remote learning

Relying on remote learning was a suitable response overall, and Maldives was better prepared to adopt such an approach than many countries in the region might be, in that the telecommunications network had national coverage, so TV broadcasts reach most homes, internet coverage reached every inhabited island – though not each house, except by use of mobile data – and tablet computers were already available to students from Grade 3 upwards. The majority of households (about 85 per cent)[87] have a mobile phone (though many are not smartphones) but 20 per cent do not have internet access in the house via expensive mobile data.

However, remote learning had its limitations, in terms of effective reach, the education system's readiness to provide high quality learning opportunities, its suitability for learners – especially young learners in preschool and in Grades 1 and 2 – and in terms of access, inclusion and suitability for learners with SEN.

Effective capacity to learn from internet-based packages (Google Classroom, Google-Meet) and by Viber was reportedly challenged by insufficient bandwidth, the need for access to shared devices, data download limits, suitable study space, effective connection speeds in a house with multiple users, and the presence, absence or helpfulness of parental support to the learner (especially younger learners or learners with SEN).[88]

At the time of the study, there had been no survey to monitor access to remote learning. However, updated data in MEMIS shows that by end of November 2020, a total of 54,218 students out of 76,461 were reached with online learning and a total of 68,785 children were reached with televised lessons.[89]

Opening and closing

Male' schools reopened after the initial closure but closed again abruptly after two weeks, because of an increase of COVID-19 infections nationally and parents' reluctance to send their children back to school.

Eid holidays experienced large numbers of people travelling, typically to return to their home islands for the festivities; travel restrictions and other rules were relaxed for the holiday. This was soon followed by an increased infection rate, prompting the reintroduction of travel restrictions, stricter quarantine measures and school closure in Male'. At other times, people who had travelled from islands to Male' for medical treatment were unable to leave the capital to return to their islands, due to inter-island travel restrictions, which caused hardship and demands for the government to provide living expenses support.[90]

Reduced study time

At the time of conducting this study, Male' schools were open from Grade 8 upwards. However, schools were operating for fewer hours than previously, for four rather than five days a week, and in some cases using a combination of onsite and offsite learning.[91] For example, although a school might have reopened, the daily timetable was reduced to four hours of classes, of which one hour was allocated to hygiene and handwashing, leaving three hours per day for study. School hours were being restored in stages, from a reduction to three hours per day. Schools were only open for four days per week rather than the previous five days, because the fifth day was allocated to teacher preparation and other work arising from adapting to teach remotely.[92]

Reduction of effective study time had several elements: the reduced weekly timetable; lost time when schools closed and teachers were not prepared to switch instantly to distance teaching; and the limitations of teaching and learning via TV broadcast (Telikilaas lessons) and online class interaction.[93] In order to assist with social distancing in school, some schools adopted a two-shift system; other schools adopted alternate days attendance: in the latter, the four days of school became two days.

These constraints on learning strengthen the rationale for investment of more effort in remote learning, even in places and classes where the students were able to return, part-time, to classroom attendance.

Adoption of remote teaching and learning by schools

Schools were pressed into adopting the remote learning approach with the onset of the COVID-19. The Google Suite and EduPage software and tablets which would become key to the national remote learning response were already in situ at schools, but teachers and schools had made only limited use of them before the pandemic. With the circular of 14 May 2020 and accompanying guidance document, teachers were directly instructed to use online classes. The early days of the school closures saw rapid uptake and active utilization, as schools started using Google Meet, Google Class, Viber and Telikilaas.

The quality of remote learning materials and processes

The quality of lessons recorded by teachers in Telikilaas was variable. When development and production of lessons was devolved from central level to schools, steps were taken to improve lesson presentation by providing tips and guidance in a MoE note, and by establishing quality assurance procedures.

Monitoring remote learning

It is important to monitor the learning achieved through remote modalities to assess their effectiveness and to compare whether the same outcomes are achieved through distance learning as through regular school-based learning. Without rigorous assessment, either through remote learning assessments or by diagnostic assessments carried out after reopening, it might be assumed that the learning achieved by remote learning is much less than in regular school. After all, remote learning has limited reach and supervision, reduced interaction and support from teachers, and no face-to-face group interaction. Learning materials are limited, demonstration is absent, and there are limited opportunities for immediate, individual feedback on performance (assessment for learning). The level, effectiveness and appropriateness of support provided to students by their parents are unknown, and it is impossible to tell how long learners spend effectively engaged in studying.

This lack of assessment is a significant gap in the education provision available by remote learning – the MoE does not have the capacity to run distance learning assessments and cannot measure learning when schools are closed.

As a priority, work must be done to discover the best methods to assess participation and learning efficiently, how to analyse results, how to provide useful feedback, and how regularly should assessments be carried out.

Individual teachers have some opportunity to assess and give feedback on live classroom activities in Google Class or by reviewing assignments submitted remotely. However, this depends on individual teachers' skills and does not provide an overall or reliable picture of student learning. It should be noted, however, that the MoE advised teachers not to emphasize assessment during the COVID-19 school closure emergency, in view of the difficulties and stresses for everyone involved.

Inclusion of students with complex learning profiles

The capacity of Telikilaas and Google Class to meet the needs of students with special educational needs – each of whom has an individualised education plan (IEP) – was limited.

There are only a few timeslots in the weekly broadcast Telikilaas timetable allocated to IEP-focussed programmes, and these have to be used in rotation to cover the diverse range of IEP. Therefore, the broadcast IEP Telikilaas lessons are only occasionally relevant to an individual learner. The quantity, as well as the functionality, of these lessons for a learner with an IEP means the Telikilaas lessons cannot compensate for the amount of learning support the student has lost by being out of school. However, 28 Telikilaas IEP lessons were also made available on the Filaa portal and thus widely shared for teachers, parents and students to access online on demand.[94] The Telikilaas lessons need to be supplemented by other teaching and support for children with SEN.

Signing for deaf learners is used on some videos made for Telikilaas, but not in most cases. Teachers were reportedly unfamiliar with using the captions/transcription feature which may have been available when recording or listening back to videos, so a separate person signing was used (where available) along with the main teacher speaking on the screen.[95]

In a pre-recorded Telikilaas, the teacher/presenter cannot provide individual support. In Google Meet-based classes, the teacher's support to the individual learner is limited by sharing time across the group and by being remote and unable to include physical support. Nevertheless, examples are cited of learners valuing the Telikilaas and the Google Meet classes.[96]

Observations from interviews confirm the expected points that:

• Parents and caregivers need support from schools to be able to support their child's engagement in learning when at home.
• Blind students cannot use Telikilaas lessons.
• Teachers use one-to-one Viber calls and G-Class calls to interact with students who have SEN, and these voice or video calls are extremely valuable in the absence of face-to-face contact to gather information for monitoring, evaluation and planning during the COVID-19 period.

A range of surveys and impact monitoring have been commissioned. Some have been undertaken and reported, others were in preparation stages or had been initiated but had not yet reported at the time of conducting this study.

The DOIE carried out an assessment of children with disabilities in the Greater Male' area and routinely collects such information. One such study (yet to report at the time of carrying out this study) was a simple survey using a Google questionnaire form, asking learners about the media through which they studied and their experience of it.

The Quality Assurance Department (QAD) of the MoE planned to develop an evaluation to measure learning achieved and learning lost in the period of COVID-19 disruption. The plan was that scores of students would be compared against their performance at the end of the previous school year (December 2019), which would be taken as a baseline. The subjects to be assessed are English language, Dhivehi language and mathematics for Key stages 1 and 2 (ages 6–12). The intention of QAD was to use this information as the basis for remediation plans.

QAD also carries out external reviews of schools, verification of schools' self-evaluations, and a National Assessment of Learning Outcomes. Dimensions QAD seeks to address in its School Improvement, Quality Assurance and Accountability Framework are inclusivity, child-centred teaching and learning, health and safety, family and community partnership, and leadership and management. QAD seeks in the specific context of COVID-19 to identify the number of students in quarantine and isolation, whether these students have access to continue their education, and whether students with other health needs are catered for.[97]

04

Lessons learned

Telikilaas TV programmes have good potential to be useful for learners, especially in the lower grades, once schools are functioning in 'the new normal', based on face-to-face classroom teaching.

4.1. Plans to build back better

In returning to school and looking to the future, several points have been identified by teachers and managers as steps that would build the educations system to be better than before.

Overall, there is an expectation that ICT will continue to be used as a component of the teaching and learning process. This does not mean a wholesale change from traditional face-to-face learning to a predominantly remote, self-directed or distance learning approach. Rather, it means an adjustment to include the remote elements as a part of a blended approach. The teacher, and school attendance, are still expected to be the core of school experience, but the use of digital technology (from home and in school) will probably be an integral part of school education.

Ensure access for disadvantaged and remote learners, so they are not left behind by a digital divide

However effective remote learning provision can be made for those who engage in this mode of teaching and learning, it will not have succeeded unless the most remote, digitally disadvantaged and least connected learners are included. As an essential underpinning to the continuing and developing use of distance education (both at times of school closure and in 'the new normal' once schools are fully reopened), effective, affordable and accessible means of internet access are required nationwide. This will require investment in telecommunications infrastructure and financing, at national and island levels, plus social and technical support for learners, teachers and parents who so far have had only slow, limited or expensive access.

Prior to such investment, it will be necessary to carry out a mapping of school connectivity. This should not be simply to obtain a 'yes/no' response on whether there is an internet connection, but should collect details of the type of connection, the bandwidth and the quality of the connection. A survey will also be needed to build a picture of home-based connectivity and devices, and available support from home. This survey should identify the level of digital skills in the household, to estimate the need for support to the most marginalized students and to understand where they are.

Establish and enhance the quality of Telikilaas for younger learners

Telikilaas TV programmes have good potential to be useful for learners, especially in the lower grades, once schools are functioning in 'the new normal', based on face-to-face classroom teaching. The Telikilaas lessons can also be useful for orienting and teaching parents and caregivers who are supporting their children's learning.

Telikilaas was developed at pace, in a difficult and rapidly evolving situation, with minimal advance preparation or training. The methods of production then changed, and whilst some lessons are excellent, the quality of the programmes in these circumstances was inevitably uneven. Nevertheless, the rapid production and deployment of a large body of lessons across curriculum subjects and grades is a significant achievement and can usefully be built on. Teachers have gained experience, confidence and skills in preparing these lessons, and the medium has value in Maldives.

Telikilaas can produce lessons at relatively low cost, it empowers teachers who produce the lessons, and it is an effective way of creating and sharing lessons. It is not a full substitute for live, interactive teaching, but it can be a useful component in a blended learning approach and is a good resource.

Although Telikilaas started first with senior grades, its most useful place is probably for lower grades, where students are not necessarily using computers or mobile phones, but who mostly have access and ability to watch the programmes on TV. (Currently Grade 1 and 2 students have not been provided with tablets, and this applies also to Foundation and pre-school learners, but the ERP includes providing tablets to these groups.)[98]

The medium of television, and the use of teachers around the country as developers and presenters, is suited to direct teaching, information sharing, reassurance and reinforcement of classroom teaching to young learners and to caregivers. That the Telikilaas programmes are broadcast at set times, which can be used to structure young children's attention, and are also available (for those with suitable internet access) to watch online or to download at times convenient to the parent and student, renders these programmes a useful resource.

In the longer term, when the current emergency situation has receded, there will probably be issues to resolve about airtime availability and cost.

Key UNICEF resources to help develop and enhance remote learning in Maldives

UNICEF reviewed six Telikilaas lessons in detail and gave detailed written feedback and advice on areas of strength to build on and areas with room for improvement. The lessons reviewed were in English (Grades 7 and 8), mathematics (Grade 8), business (Grade 10) and economics (Grade 11). In the continued development of Telikilaas, it will be beneficial to consider and (where applicable) incorporate lessons learned from this feedback.[99] The lessons were found to be generally very educational, although there were some suggestions for improvement.

Areas highlighted as successful included:

- Lesson expectations match the curriculum and are grade- and age-appropriate.
- Learning objectives and success criteria are often identified at the beginning of the lesson.
- The lessons are developed with a clear target audience in mind.
- The teacher speaks clearly and in a conversational tone.
- The lessons develop with a clear path in mind and follow a well-structured outline.

There was room for improvement in the following areas:

- Identify the engagement expectations of the child and list any materials required to succeed in the lesson.
- Include and identify methods of assessment/checking for understanding.
- Use more interactive and engaging learning activities during the lesson.
- Use appropriate pauses.
- Use inclusive lesson techniques.
- Improve quality of the presentation.
- Use interactive and engaging teaching techniques.
- Post-lesson learning.
- Complementary resources.

UNICEF has also produced a useful guidance note and reviewing matrix for video and televised lessons.[100]

Key points to consider from the guidance note included:

- Appropriateness to curriculum and age group.
- Clarify learning objectives and success criteria.
- Identify an assessment process and check for understanding (with examples of self-assessment tools).
- Clarity of identified target audience.
- Instructional methods of teaching.
- Development of lesson and techniques utilized.
- Use of materials.
- Inclusive learning (and key areas to address for inclusive learning).
- Quality of lesson presentation.
- Teaching engagement and interaction techniques.
- Applicability of post-lesson learning.
- Use of complementary resources.

The UNICEF Regional Office for South Asia (ROSA) has produced a concept note optimizing the potential of technology for learning.[101] This concept note provides a core and current underpinning of UNICEF-supported education practice in the region, relating to the use of education technology, grounded in the need to make the use of technology serve its purpose – to be effective, affordable and inclusive.

This concept note lays out five key pillars of its strategy:

- Equity focused and scalable
- Leveraging and aligning strategic partnerships with common goals and governance structures
- Learning at the centre
- Evidence and quality assurance
- Global alignment and local adaptation.

The document then includes as appendices:

- Indicators
- Continuity of learning matrix
- Preliminary findings from continuity of learning surveys
- Concept of digitalization of the education system leveraging digital public goods
- UNICEF Country Office engagement with digital learning
- Skills4girls.

The concept note is specifically suited to the present moment, with education disrupted by COVID-19 and the need both to address the pressing immediate needs and to build a sustainable, equitable, quality education system for the future. Critically, it is not a 'technology-driven' concept – it is grounded in the realities of household access to technology and includes the possibility of the use of no-tech or low-tech approaches in the short term if these prove most realistic to enable remote and disadvantaged learners to engage in learning. Equitable access and functionality are the key considerations.

Embed the use of Google Classroom (or alternative) as an intrinsic part of teaching and learning for older learners

As was indicated in MoE guidance of 13 June 2020 and developed from the ERP, the national vision for the future of school education is to include elements of technology in a blended approach. Before the COVID-19 crisis, there was already a vision to include internet-mediated learning and use of tablets in mainstream teaching and learning in Maldives. The response to the pandemic has accelerated that process. So, building back better will mean maintaining the use of Google Suite for teaching, learning, student assessment and records, as an adjunct to classroom learning.

Review and decide which national software education platforms to adopt

The use of EduPage as an alternative to the Google packages, which has been advocated on the grounds of broader range of integrated management functions and the suspicion that the free Google software may become chargeable for the full specification and advertisement-free version in the future, is an option to explore and evaluate. As things stand, however, Google Suite is more widely used and familiar, while the teaching and learning potential of EduPage has yet to be substantially explored beyond timetabling, teacher management and student and teacher attendance and performance records.

Whichever software is selected strategically, it will be important to build capacity of teachers, learners, managers and parents to use the functions effectively and to adopt it systematically.

Improve integration of school EduPage (or Google Suite) records with MEMIS, and access to MEMIS data by schools

The interface between school record-keeping in EduPage, in Google Classroom and in MEMIS will need to be resolved, to ensure efficiency, avoid duplication and maximize utility (at school level and nationally) in terms of student and teacher records and data. At present, EduPage is a useful tool for managing records within the school, but for national monitoring and information requirements, schools are directed to enter student performance and class records daily onto the MEMIS. The MEMIS, on the other hand, does not have the management and individual feedback functions which EduPage has. School principals and teachers cannot use MEMIS data operationally – they just feed the school data into the national system.

Recording and tracking absenteeism, whichever system is used, is important to enable schools to take action to prevent dropout, to keep all students in school, and to detect and respond to issues from basic analysis of absenteeism records (such as MHPSS issues in students, and problems at home).

There is also a need to standardize school responses so that action is taken to reach out to parents when their children miss school. There should also be referral mechanisms in place for use when issues such as gender-based violence, bullying, or any kind of child protection issue are detected or suspected. This is an efficient way to prevent dropout, and also to strengthen better transition between levels and to identify the need for support earlier (and before children/adolescents fall out of schooling permanently).

Utilize tablets in classroom teaching as well as remotely

As already planned, and done to some extent on a piecemeal basis, teachers should continue moving from paper-based student records and marking to digital, and adoption of some online teaching and learning. This shift needs explicit focus and support from MoE and school management so that it becomes entrenched after full reopening. Tablets and Google Suite were not supplied in response to the pandemic but before it, as part of an existing plan; they came to into active use through the catalytic effect of the pandemic-related school closures and MoE directives on remote learning.

It is important that this is not treated as a separate, remote learning alternative which means school attendance physically ceases. The emphasis to be effective needs to be on using the technology in blended learning, combined with face-to-face interaction. The separation between study and assignments done outside the classroom and the marking, feedback and record-keeping of those done outside the school and those done inside become blurred. Tablets are new tools in classroom teaching as well as for home-based study.

Key in this will be to have the teacher engaged in providing individual and group teaching and feedback: the technology will not be effective if students are left simply as consumers of online information, activities and tests without teacher and peer interaction and support.

The proposed approach is appropriate to Maldives (whereas it may not be so appropriate in many other countries), due to the relative prosperity, good electricity supply, small student numbers, homogeneity of mother tongue language, curriculum and culture, increasing use of English in education and as a second language, and level of internet penetration.

Address the issues of connectivity and cost

In all considerations of online methods, the issue of connectivity and the cost of data need to be addressed. Even with the limited amount of online teaching and learning of the COVID-19 response, teachers and parents/students were disadvantaged by these constraints and costs. The connectivity, bandwidth and data cost burdens of using an online approach need to be balanced and matched by infrastructure and financial support. This needs to be such that online participation is acceptable and attractive to students and the parents who pay for it, and to schools and teachers. It must also be sustainable financially for both the education system and the telecommunication / internet service providers.

Review the curriculum

The reduced curriculum will have been used for the present school year. MoE will need to decide whether to return to the pre-COVID-19 full design, to remain with the stripped-back emergency version, or to take a third option. The third option is probably the most likely – to stay with a lighter load, but restore some elements of the subjects which had been sacrificed to achieve the scaling down.

The curriculum audit, which is necessary in response to the crisis, also offers the opportunity to make the curriculum more gender-transformative and inclusive. This opportunity should not be missed.

The curriculum review would also benefit from being undertaken alongside the decisions on maintaining a hybrid model, and on introducing some new elements in the curriculum and the means of assessment and teaching, suited to the blended approach.

Revisit assumptions on student assessment

The shift to remote learning in the school closure brought instructions from MoE that schools were to treat student assessment as a teaching and support function, to avoid assessments which might increase student stress, and not to compile marks for annual summative assessment. While this relaxation will not last indefinitely, this is a good opportunity to revisit both why and how assessment is carried out, what is assessment and how much of student learning should be assessed. Such a fresh look would be in line with the adjustment of teaching and learning media

to incorporate use of digital communication and tablets, merging in-class and out-of-class learning activities and assignments, as part of the element of blended learning which is envisaged for the future.

Maldives has a longstanding relationship with English examinations, having used O levels, GCSE and A levels as external assessments.[102] The current system uses Cambridge IGCSE and EdExcel/Pearson A Level examinations. There is no reason to stop doing so, but the diets of these assessments have been disrupted around the world by the pandemic, as have examinations in Britain. Looking to the future, the Maldivian education system would look at what provisions these international examination boards plan for assessing and certifying students whose study has been set back and for whom the planned examinations were cancelled or delayed.

4.2. Recommendations for increasing resilience to future shocks

In order for the education system to be able to continue effectively teaching students in the event of future shocks such as the current COVID-19 pandemic, the following seven recommendations are offered in terms of remote learning and inclusion and access:

Recommendation 1: Consolidate a full and clear picture of the needs and situations of learners across Maldives

While surveys, reports, monitoring, and data collection have been undertaken (some completed, others ongoing or planned) and are supported by MoE, UNICEF and other parties, there remained significant areas of uncertainty. These include the situation in remoter parts of the island communities; the extent of learning and the difficulties experienced by learners with special needs; the learning loss resulting from COVID-19; the relative usefulness of elements of the distance-education provision (by Google Classroom, Telikilaas, Viber and other means); the well-being of learners, teachers and the wider community; and the detailed picture of internet connectivity and access. To plan effectively and appropriately for the future, it would be useful to fill knowledge gaps and consolidate a full all-round picture.

Recommendation 2: Monitor and assess the learning achievement of students

It is important to evaluate how much learning is taking place, and where there are major gaps in learning, during the remote learning and when students return to face-to-face classes. Whilst assessment should not be emphasized at the expense of attention to teaching and supporting learners in other ways, it is vital to understand what the learning loss has been while students have been out of face-to-face school. As a more discriminatory diagnostic, it will be important to understand which students have fallen behind, and where there are inequalities. There should be regular formative assessment of individual students' progress in both classroom and in remote-learning modes. On a systemic level, assessment is necessary to identify the successes and failures of the remote-learning approach, across the curriculum, socio-economic groups and the country, to inform planning and the provision of compensatory measures and to adjust expectations.

Recommendation 3: Monitor attendance and school compliance with safety protocols

Schools should systematically monitor attendance and absenteeism to establish early warning of dropout – data from such monitoring should be integrated into the MEMIS. There should be standardized responses to absence. Compliance with safety protocols should also be monitored and fed into MEMIS, including the development of WASH infrastructure and maintenance of infection prevention and control measures and wider hygiene practices.

Recommendation 4: Strengthen the existing mechanisms for providing psychosocial support (PSS)

Learners, teachers, family members and others may have experienced severe anxiety; may feel disconnected from learning; or may have other non-academic matters which interfere with their take-up of learning opportunities. To ensure maximum learning and settled attention, it would be helpful to strengthen PSS systems and processes,

especially those based in schools. Outreach support should also be provided to learners and family members outside school, as required, so that these matters can be addressed and appropriate support provided.

Equally, other well-being issues of students should be considered, and support should be provided to ensure the whole-person well-being, safety and health of students and to strengthen their readiness to study effectively.

The MoE education response includes raising the awareness of teachers about psychosocial first aid.[103] It will be useful to develop this area for active utilization with students and teachers on a continual basis, so as to be prepared for any future shocks.

Recommendation 5: Build capacity of teachers to teach, assess and support online

Teachers have embarked on learning to use the available software applications effectively in their roles interacting with, teaching, assessing and supporting their students. While many teachers have learned a great deal formally and informally during the COVID-19 shift to remote learning, further systematic training and ad hoc support and guidance will also be necessary.

Teachers would also benefit from further skills development in methods and techniques of remote teaching and learning. Subjects would include how to design, prepare and deliver online classes; setting and giving feedback on activities at a distance; assessment; and counselling and supporting students.

Peer-to-peer, moderated online capacity development and sharing platforms for teachers may be useful. Exchange platforms, moderated by experts, can make training more relevant for teachers as they exchange pragmatic advice and suggestions on how they can address the practical issues they encounter. This kind of community of practice has the potential to be more efficient than traditional face-to-face in-service training and will be more likely to lead to change in the classroom. The sharing could include lesson plans, activities to engage students, teaching and learning materials, test questions and other resources, videos, and strategies found effective to respond to difficult situations or barriers to effective teaching.

Recommendation 6: Build understanding and cooperation of parents to support students in their home-based remote learning

An issue raised at various times during this study is that when students are not in school, their parents (or caregivers) have a vital role in supporting and facilitating their learning. This applies to parents making available suitable time, space, facilities (desk, tablet/phone/ computer); organizing, enabling and helping the student to be present and focussed; and fulfilling the attendance certifying role. For many learners, especially younger ones and children with special educational needs or individualized education plans, the parent's presence and help in the lesson is vital.

Proactive steps are already being taken to support parents in these roles. It will be worthwhile to continue these, including with national communications and individual school-to-parent communications.

To standardize and systematize communications between schools and parents, and between teachers and parents, the role of school management committees should be revisited, as should the role of school leaders. Now that a significant part of children's education takes place through remote learning, is important to communicate clearly to parents what the learning objectives are, linked to specific skills that need to be acquired. The objective is not to list all that a child is supposed to remember, but rather to state clearly what the child is supposed to be able to do. This is especially important for early grades for foundational learning.

Recommendation 7: Strengthen the staff capacity of the Department of Inclusive Education to enable the department to fulfil its role

The DOIE has a vital role to play in ensuring education is accessible to and suitable for all learners, including those with different disabilities, capacities and needs. The DOIE has a skilled and committed core of four professional staff but is severely understaffed to fulfil this role. With the departure of its highly experienced head, this becomes more so.

The DOIE was structurally removed from within the National Institute of Education and established as an independent unit, in recognition of its importance and the seriousness with which inclusion is taken by the MoE and development partners. However, in separating it from its former parent institution, DOIE was left without the extensive administrative backup to support its work which it formerly enjoyed. For DOIE to fulfil its role, administrative and operations staffing needs to be strengthened to support the education professional team.

Recommendation 8: Strengthen the support available to learners with SEN when using remote means

The use of remote and online learning offers great potential benefits for learners with special educational needs, but it fails to satisfy learners' needs in the same way as face-to-face participation in class and in school, unless steps are taken to make the teaching accessible, and to compensate for the limitations of teaching and learning remotely for learners with different needs.

Learning materials and interactive activities need to be produced in the medium which is most accessible to the individual learner. While each learner's profile is unique, the DOIE notes that, following the principles of Universal Design for Learning (UDL), materials and activities which are useful for learners of different profiles will also be stronger for learners who do not have special needs, and that the principle of UDL is included in the Revised Inclusive Education Policy.[104]

Recommendation 9: Match the reliance on technology with infrastructure, connectivity and affordability

The technologies available are potentially powerful and effective tools for use in teaching, learning, record-keeping and data management. Which media, platforms and applications to use needs to be decided in relation to the capacity of the system and context to support them, and of the individuals involved to make use of them. In simple terms, how easy and affordable is it for each student to obtain the materials and the personal teaching support they need in order to learn, using one or other remote learning channel, and in what combination with other channels?

Getting these decisions right will determine the ability of producers and providers of learning materials, students, teachers, managers and caregivers to utilize the most appropriate media to good effect. Decisions on technology will need to be made in relation to the Education Sector Plan and the ICT Master Plan. Connectivity mapping will be needed to produce evidence for an implementation plan, which must balance the immediate needs of those who are not connected (and who need solutions for distance learning in the present and near future), with the common future needs of all online learners.

4.3. Conclusion

The original overall objectives of the case studies for this rapid Situation Analysis were:

- To assess and estimate the various impacts of the COVID-19 epidemic on the education sector and stakeholders (children, adolescents, teachers, parents, education officials etc.) in Asia. (East, Southeast and South Asia sub-regions).
- To identify examples of promising responses and strategies in education and associated social sectors, which can be shared with other countries.

The following points have emerged from this Maldives study, under these two headings.

The various impacts of the COVID-19 epidemic on the education sector and stakeholders

The pandemic has had direct impact on the education sector and all involved:

- Expectations of a typical school year, and of student progression being as expected were abandoned.
- All school-based teaching and learning was temporarily interrupted.
- Teachers' assessment of students' learning has been undermined by the absence of face-to-face contact and limitations in assessment carried out remotely.
- Effective study time was reduced, even when remote learning got underway and when schools began to reopen. What time was spent in learning was less closely supported and likely less effective, by whatever medium (Telikilaas, Google Suite, or reopened face-to-face school attendance) due to the limitations of each mode.

- Students from disadvantaged backgrounds in remote islands are not likely to learn effectively from home-based remote learning, especially forms of learning reliant on high-speed internet connections.
- The school curriculum was condensed for the present school year, to streamline the teaching and learning content. There may not be a return to the old curriculum – this represents a positive opportunity as well as a problem.
- Teachers missed the social contact with children when teaching from home and experienced a decline in their mental health and well-being.
- Teachers' income dropped even if government salary continued, due to the loss of private tuition opportunity.
- Budget deficits resulting from the pandemic will impact on planned improvement of school WASH and other infrastructure.
- The neediest children will suffer nutritionally, and progress against stunting will be impacted with the suspension of the school feeding programme and with increased economic hardship for families.
- Overall levels of stress and anxiety among students have reportedly increased, and mental health and well-being decreased.
- Early childhood education and foundational learning are likely to have been particularly damaged.
- The national economy has suffered, and individual financial security for many been reduced, despite government schemes to mitigate the impact by reducing or deferring some service charges.
- One positive impact has been to accelerate teachers' and students' engagement with remote learning and to push the uptake of the ICT resources at their disposal – tablets, EduPage, Google Suite, Viber, other software, public service broadcast television and a web portal to post materials.

Examples of promising responses and strategies in education

The situation forced on the country by the COVID-19 pandemic created opportunities for rapid change and for positive developments to flourish. Some of these changes may be sustained and refined, others may not:

- There was a widespread shift to electronic submission, marking and return of homework. Once this had been adopted it became preferred by some teachers and learners.

- Telikilaas programmes were directed to parents, to help them support their children's learning. There were also plans to print and distribute to parents' guides (in English and in Dhivehi) on home-based learning and how to provide enabling learning environments.
- Schools and teachers were encouraged to use a range of educational, communications and management software, with schools selecting to suit their needs and preferences.
- Touch-screen tablets, which had been procured but not fully utilized prior to the pandemic, became core tools for children from P3 upwards. Provision was planned to extend provision also to KS1 (Grade 1 and 2) students, and to students with SEN. To address connectivity issues, internet dongles were to be provided to facilitators and to students identified as disadvantaged.
- A free data allowance was provided for student online learning; this was inadequate but raised the question of establishing sustainable and affordable internet connectivity for all learners and teachers.
- Telikilaas lessons and other materials have been uploaded to an MoE online portal, Filaa.[105] The establishment of the portal as the go-to place for education resources is a forward-looking move.
- Teachers around the country have begun developing and sharing teaching materials (mostly Telikilaas lessons) with other teachers through the Filaa portal. This has supported peer-to-peer development – sharing materials and lessons is a positive step in teacher professionalism.
- Teachers were trained as Google Classroom teachers/ Google Suite users, equipping and encouraging them to use and share new teaching and class management methods.

- Free access was obtained from an international publisher and examining board to access digital editions of the relevant textbooks for the duration of the COVID-19 crisis. The textbooks can be downloaded to the Android tablet or other device and used offline.
- Individual schools adopted different combinations of online tools as teaching and learning resources, and different teaching strategies. Some of these were showcased by in a virtual innovation conference organized by the National Institute of Education.
- The adoption in some schools of the student and school records management tool, EduPage, has shown teachers the benefits of electronic record-keeping and freedom from laborious paper-based systems.
- Efforts are made to cater for students with SEN, though these efforts are insufficient. Signing for deaf learners is used on some videos made for Telikilaas (though so far not many); teachers use one-to-one Viber calls and Google Classroom calls to maximize interaction with students who have SEN and who need such contact.
- The Telikilaas lessons developed, and the review of and feedback from UNICEF, provides a way forward to progressively refine and improve lessons.
- Teachers will probably continue to use Google Suite for teaching, learning, student assessment and records as an adjunct to classroom learning, and to build it into their routine practice.
- The reduced curriculum will have been used for a full school year. This gives the opportunity to reflect on the experience, to distinguish between what is necessary (or desired) and what is not, and to adjust the curriculum accordingly.

Annex A

People interviewed and consulted

National institutions

Dr. Abdulla Rasheed	Minister of State	Ministry of Education
Ahmed Mujahid	Deputy Minister	Ministry of Education
Ibrahim Asif Rasheed	Director General	Ministry of Education
Fathimath Azza	Director General	Ministry of Education
Moosa Adam	Senior Policy Director	Ministry of Education
Aminath Najfa	Education Officer	Ministry of Education
Ahmed Athif	Director General	Department of Inclusive Education, MoE
Adhila Rushdhee	Education Officer	Department of Inclusive Education, MoE
Mariyam Nasir	Director General	Quality Assurance Department, MoE
Nahuza Shareef	Education Officer	Quality Assurance Department, MoE
Shiyama Aboobakuru	Education Development Coordinator	National Institute of Education
Shuhudha Rizwan	Education Development Coordinator	National Institute of Education

School-level Implementers

Ismail Saudulla	Principal	Gnaviyani Atoll Education Centre
Mariyam Zumra Muneer	English Teacher	Gnaviyani Atoll Education Centre
Rahma Abdul Rahman	Principal	Kalaafaanu School, Male'
Hawwa Ruzna	SEN Coordinator	Kalaafaanu School, Male'
Nizna Abdul Gayoom	Mathematics Teacher	Kalaafaanu School, Male'
Asma Hussain	Leading Teacher	Afeefudeen School, Haa Dhaal Atoll
Aminath Sanaa	Special Education Teacher	Haa Alif Atoll Education Centre
Ali Fazil Mohamed	Leading Teacher	Haa Dhaal Atoll School
Niziya Hasan	Leading Teacher	Hafiz Ahmed School, Gnaviyani Atoll
Mohamed Fayaz	Principal	Hulhudhuffaaru School, Raa Atoll

Annex B

Questions asked in interviews and meetings

A set of questions was developed to address the focus of the Maldives case study theme, Access and participation in learning – provision of distance learning. The theme and its main components and overarching questions were developed and agreed in discussion among UNICEF, the MoE and Cambridge Education. Subsidiary and extending questions were prepared to explore this theme and consolidated in a document.[106] The questions were provided to interviewees. These aspects and questions were pursued as relevant to the respective respondent individual or institution in each case. The questions are listed below.

Summary

The Republic of Maldives adopted distance education as a response to the identified necessity to close schools in the face of the arrival of COVID-19 in the country. This study seeks briefly to explore the experience and perceptions of this shift, in the short time that it has occurred, and capture some observations about it which may be value to Maldives and to other countries.

System readiness

Prior to the school closure, what capacity was there in Maldives for the school education system to switch from the conventional classroom-based model to continuation with students home-based, using distance learning methods?

- What existing capacity, including communications infrastructure and connectivity, organisational structures, institutional experience and individual expertise, was already in place to adopt distance learning by different media?
- What materials or templates were already available to use or to adapt for the switch to distance learning?
- How were children with low learning or ability levels, special educational needs or disabilities reached and supported to participate in learning?
- How ready was the system to manage learning during school closures?

- What policies were in place for distance learning and digital delivery?
- How was the existing digital literacy of children, parents and teachers?
- How were teachers trained to support digital learning – facilitating, administrating and organising, teaching, assessing learning, giving feedback to students?
- Were teachers or others adequately prepared for a role of providing support in health information and psychosocial counselling?
- How were students and teachers supported to access digital learning?
- Were there differences in the training and support provided for the Greater Male' area and the islands to access distance learning?
- How swiftly was distance learning available to learners and functioning systematically, following school shut-down?
- How far was budget available to be allocated to developing and running distance learning, before and during school closure?
- What cost for accessing school education would be borne by learners' families, before the change to distance learning, and to access and participate in distance education after schools closed?
- What 'reach' (coverage) to include the most remote and isolated learners did the government school education service have before school closure, and how did the reach of distance learning by different media compare with that reach, when introduced?

Quality of provision

Once the school education system moved to distance learning in the face of the school closures and other restrictions brought about in response to the COVID-19 pandemic, how appropriate and effective were the materials and services to enable students to continue learning?

- To what extent have the planned remote learning developments and interventions indicated in the Maldives Education Response Plan been carried forward, or look likely to be carried forward?
- Which media and methods have been realised, and with what relative success and scale?
- What learning materials have been developed in different media for the distance learning?
- What is the quality of the distance learning materials, in terms of effective pedagogic design for self-study, as well as in terms of content and production?
- What steps were taken to make the materials and delivery inclusive for remote and disabled learners?
- How were materials adapted for different ages, children with disabilities or special educational needs, and learners with different ability levels?
- What were the quality and sufficiency of programme delivery and learner support arrangements?
- What support and training were provided to teachers, parents and other community members, and to students, to be oriented to learning at a distance?
- What were the levels of access and participation in learning, for Greater Male' and for the islands?
- How were levels of student access and participation monitored?
- How have access and participation been checked in the islands?
- How did the system monitor and quality assure the distance learning process overall – successful delivery, learners' response, and the quality of the learning experience?

Learning

The learning and experience of students, and of teachers and others, will have changed through the adoption of a remote learning approach. From the evidence available from documents, and from perceptions of stakeholders and of institutions involved, what can be noted regarding changes in the learning that has been achieved and about the process of achieving it?

- What impact has the switch to distance and digital learning had on students' learning, and to their relationship with the learning process and school?
- What aspects of learning are felt to have worked better and which to have worked less well using distance learning?
- How was foundational learning impacted by the switch to digital/distance learning?

- What diagnostic student assessment took place whilst schools were closed, and what difficulties were identified?
- How was the school curriculum adjusted or condensed to work by a distance or blended learning approach?
- How has psychosocial and emotional support been included in the distance learning delivery (e.g., for learners anxious from school closure and the disruption and threat of the virus)?
- What has been the role and experience of teachers as a result of the shift to distance learning?
- How do students, parents, teachers and other stakeholders feel about distance learning?
- How will students' distance learning be integrated and recognised in their overall study path, with grade assessments, progression and qualification?

Conclusions and ways forward

While the duration and legacy of the COVID-19 pandemic is not yet known, as with education systems around the world, there is consideration that even once schools are fully reopened, there may be a reversal to shut-down, requiring a return to remote learning. Additionally, the future pattern of education may be changed into more hybridised models, or alternative means of access, including blended learning and self-access digital resources along with traditional classroom teaching becoming part of the mainstream in some locations.

What observations and learnings from the experience to date can be captured as pointers to the future, based on available documents and perceptions?

- What lessons have been learned from the experience of adopting distance learning during for school students during the pandemic in Maldives?
- How does Maldives plan to continue with distance/ blended/digital learning in the medium and longer term, after schools reopen?
- What main challenges and limitations are there to making distance learning an alternative or a component of school-level education in Maldives?
- What opportunities are there for building on the experience gained to continue the use of distance or digital learning at school level in Maldives?
- What recommendations would be made for the future, for continuing, changing or developing what has been done to date in distance learning?

Endnotes

1. Maldives (atollsofmaldives.gov.mv), accessed 4 December 2020.

2. UNDP Maldives, Maldives Socio-Economic Impact Analysis – Addressing the socio-economic impact of COVID-19 on the Maldives, 27 April 2020, p4.

3. See for example online training with resources and current UNICEF perspective on MHPSS in emergencies (UNICEF 2020): mental health and psychosocial support in emergencies | unicef Albania

4. Ivan Coursac, Education Specialist, UNICEF ROSA, personal communication, 2020.

5. The mobile phone application Viber was frequently mentioned as a popular informal telecommunications channel used between individuals and in ad hoc groups variously among teachers, parents, students and others. Other applications are also available and in use.

6. Maldives: WHO Coronavirus Disease (COVID-19) Dashboard | WHO Coronavirus Disease (COVID-19) Dashboard accessed 4 Dec 2020

7. The three phases are: 1 – prior to schools reopening; 2 – part of the schools reopening process; 3 – with schools fully reopened. See Chapter 1.

8. Ministry of Education: Education Act, 10 November 2020, https://www.moe.gov.mv/assets/upload/Education_Act.pdf, Accessed 19 August 2020.

9. MoE, Maldives Education Response Plan for COVID-19, May 2020, citing MoE April 2020 figures.

10. Maldives | UNESCO UIS, accessed 4 December 2020.

11. Maldives (atollsofmaldives.gov.mv), accessed 4 December 2020

12. UNDP Maldives, Maldives Socio-Economic Impact Analysis – Addressing the socio-economic impact of COVID-19 on the Maldives, 27 April 2020, p4.

13. Ibid., p14.

14. MoE & Ministry of Higher Education, Maldives Education Sector Plan 2019–2023, April 2019.

15. MoE, Maldives Education Response Plan for COVID-19, May 2020. Summary points extracted from Part A. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf

16. Ibid.

17. Ibid.

18. MoE, Maldives Education Response Plan for COVID-19, May 2020. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf

19. Ibid..

20. Ibid.

21. Ibid.

22. From here onwards in this report, Greater Male' is referred to simply as Male'.

23. The islands of Hulhumale and Vilamale' (formerly Vilingili) are taken together with the capital island, Male', to be termed Greater Male'. Within the past year, a road bridge has opened between Male' and Hulhumale. Prior to that, ferries were used, as continues to be the case with Vilamale', for the short sea crossing. The growth of these two satellites is a recent phenomenon, which has been in process over the past two decades. Vilamale' was formerly a tourist resort islands, and Hulhumale did not exist – it was formed by reclaiming land and linking smaller islands, including the capital's original airport island, Hulhule.

24. MoE, Maldives Education Response Plan for COVID-19, May 2020. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf

25. MoE, Preliminary impact assessment of COVID-19 on schoolteachers, (draft, no date).

26. The reason for this is understood to be that much of some teachers' earnings comes from private tuition, rather than from their government salary. In lockdown, private tuition stopped.

27. MoE, Maldives Education Response Plan for COVID-19, May 2020. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf

28. Ibid.

29. Ibid.

30. WHO/UNICEF, Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene, Maldives, updated July 2019.

    Basic drinking water supply in 100% of schools; basic sanitation services in 96% of schools; hygiene services insufficient data to estimate in 82% of schools, no service in 18% of schools, nationally.

31. MoE, Maldives Education Response Plan for COVID-19, May 2020, p.18. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf

32. MoE, Maldives Education Response Plan for COVID-19, May 2020. Summary points extracted from Part A. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf

33. Final ERP Action Plan with Budget, updated August 2020. Budget for activity A2, Construction/upgrading of WASH facilities indicative budget of $1,212,205 was based on proposed UNICEF grant of $1.23 million to MoE, derived from application to a single donor fund. Securing this funding was unconfirmed at the time of data received.

34 UNICEF Country Office, personal communication from Mazeema Jameel. UNICEF Country Office reports that in preparation for school reopening, the MoE made sure all the schools across the country had handwashing facilities. UNICEF supported the establishment of hand washing facilities in 22 schools that did not have enough handwashing stations.

35 MoE, Maldives Education Response Plan for COVID-19, May 2020. Summary points extracted from Part A. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf

36 MoE, Preliminary impact assessment of COVID-19 on schoolteachers, undated draft.

37 MoE and UNICEF, Assessment of the situation of students who migrate to Male' for education and strategies to address vulnerabilities, abridged report, August 2015.

38 MoE, Maldives Education Response Plan for COVID-19, May 2020. Summary points extracted from Part A. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf

39 Ministry of Economic Development, Rapid Livelihood assessment: Impact of the COVID-19 crisis in the Maldives, August 2020.

40 MoF, MVR 2.5 Billion Economic Recovery Plan - Ministry of Finance. 20 March 2020.

41 MoE, Maldives ERP for COVID-19, p91. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf

42 MoF, 34.8 Billion Rufiyaa Budget for 2021 - Ministry of Finance 9 November 2020.

43 World Bank, World Bank Fast-Tracks $7.3 Million COVID-19 (Coronavirus) Support to Maldives, 2 April 2020.

44 The Delegation of the EU to Sri Lanka and Maldives COVID-19: European Union provides EUR 3 million grant funding to the Maldives - European External Action Service (europa.eu), 9 April 2020.

45 COVID-19: ADB provides $5K in grant assistance to Maldives - The Edition, The Edition, Male', 30 March 2020.

46 OFID pledges $ 20 mln loan assistance to the Maldives (avas.mv), Avas, Male', 18 April 2020.

47 USD178.9 mln secured through currency swap, IMF: MMA - The Edition, The Edition, Male', 29 April 2020.

48 State to provide unemployment allowance for people losing jobs over pandemic - The Edition, The Edition, 2 April 2020.

49 International Labour Organization, Country policy responses (COVID-19 and the world of work) (ilo.org), 30 April 2020: 'GDP growth had been projected at 8 per cent, but is now expected to be a reduction of 5.6 per cent, with a potential loss of revenue between USD168-448 million. As a result, the Maldives is now facing a serious shortfall in foreign currency earning, estimated to be at $450 million. The state budget passed for 2020 is expected to be in deficit of approximately USD779 million..

50 MoE, Maldives Education Response Plan for COVID-19, May 2020, p. 91. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf

51 SAR Education COVID-19 – Update #11 (31 August 2020; Update #12 (19 October 2020).

52 MoE, Maldives ERP for COVID-19.

53 MoE, ICT masterplan for education (unpublished document mentioned in ERP).

54 MoE, Maldives Education Response Plan for COVID-19, May 2020, p.46. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf

55 Children's learning must never stop! | UNICEF The Maldives

56 MoE, Filaa Learning Resources. https://filaa.moe.gov.mv/

57 Aishath Ali, Minister of Education, Circular 22-E / CIR / 2020 /35, Google Suite and Telikilaas, 14 May 2020.

58 MoE, Teaching and learning during lockdown, (undated), circulated to government schools with Circular noted above.

59 Ministry of Education: Standard Operation Procedures on COVID-19, March 2020, https://www.moe.gov.mv/assets/upload/SOP_on_COVID_19_09.03.2020.pdf

60 Ministry of Education: Final ERP with budget, updated August 2020. (Offline working document. received as email attachment for the use in this study, from UNICEF Maldives).

61 MoE,Maldives Education Response Plan for COVID-19. May 2020. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf. (Note: The total in Table 1 differs by $1 from the total in the ERP. This difference in the total presented in the ERP table is assumed to be a result of rounding in Excel prior to that table being converted into PDF format for incorporation into the ERP document.)

62 MoE, Maldives Education Response Plan for COVID-19, May 2020, p.41. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf

63 MoE, Circular No: 22-E/CIR/2020/37, 13 June 2020.

64 Discussions with teachers and Principals, GNAEC and Kalaafaanu School.

65 MoE, Standard Operation Procedures on COVID-19, March 2020.

66 Discussions with implementors, and with teachers and Principals, GNAEC and Kalaafaanu School. The ERP also encourages schools to maintain contact with parents for safety and to minimize potential drop-out. MoE circular 14 May 2020, Learning Arrangement in Lockdown, also advised teachers to maintain frequent contact with parents and learners and to check and verity students' presence in Google class sessions and Telikilaas lessons.

67 Interview with Adhila Rusheedi, DOIE, 27 October 2020.

68 MoE, Circular No: 22-E/CIR/2020/28, 12 March 2020, cited in ERP.

69 MoE, Maldives Education Response Plan for COVID-19, May 2020. https://support.moe.gov.mv/wp-content/uploads/2020/06/Final-Maldives-ERP-for-Covid19_13.06.2020.pdf

70 Ministry of Economic Development, Rapid Livelihood Assessment: Impact of the COVID-19 crisis in the Maldives, August 2020, pp8–9.

71 MoE, Circular No: 22-E/CIR/2020/28 [sic], 16 March 2020, cited in ERP.

72 Final ERP action plan with budget, August 2020 update.

73 MoE, Filaa Learning Resources.

74 Inclusion of IEP-based lessons may seem paradoxical as nationwide general resource, as the lessons are provided as general use, rather than for a single identified learner; but they can be selected, used or adapted, and include demonstrations of low-cost or no-cost teaching and learning aids and activities which other teachers may find useful to adopt or adapt for their own situations.

75 Teaching and learning during lockdown. MoE (nd, circulated to Government schools with Circular dated 14 May 2020).

76 By the time of the UNICEF SAR Education COVID-19 Response – Update #12 report (19 October 2020), UNICEF had supported training of 3,708 teachers (2,513 female, 1,195 male) in Google Google Suite, to enable them to teach and support students online, and had supported training of 30 instructors to serve as Google Suite Certified Trainers. The training programme will continue until all teachers are trained. Additional support to teachers is also provided through peer groups, advice videos in Filaa and from the trainers/resource people, to maximize the effectiveness of the remote learning strategy.

77 The Atoll TRCs have reportedly been under active in recent years. However, they have a history in Maldives. The present TRCs were set up by MoE in 2007, as regional learning hubs, equipped with broadband internet connections. This was supported by UNICEF [UNICEF launches teacher resource centres to improve education in Maldives, UN News, 28 November 2007] UNICEF had also supported the establishment of the Atoll Education Centres and the Atoll Primary Schools, as the first government schools outside Male' and Addu. The first AEC opened in 1978, with 58 students and 3 teachers, and by 2018 had grown to 1,127 students and 106 teachers. School History - Baa Atoll Education Centre (baec.edu.mv). From 1987, UNICEF also supported the development of the first distance education programme in the country, the Distance Education English Course (DEEC), developed by the Nonformal Education Unit of the Ministry of Education. Distance education in the remote islands of Maldives (massey.ac.nz). In the pilot year, when the course ran in three Atolls (Haa Dhaal, Lhaviyani and Laamu), Lhaviyani AEC established a Resource Centre as an AEC initiative of the then headteacher, with support from MoE. In the pre-internet era, the resource centre held teacher CPD sessions and teaching and learning aids development workshops (e.g. making big books), a graded readers library, face-to-face workshops as part of the DEEC course, and adult education classes under NFEU's nonformal Condensed Education Programme. DEEC used printed self-study coursebooks, assignments and face-to-face workshops, supplemented later by a set of short readers.

78 Ministry of Education: Final ERP with budget, updated August 2020. (Offline working document. received as email attachment for the use in this study, from UNICEF Maldives).

79 Access to the digital editions of textbooks through Cambridge Elevate, cited in Final ERP action plan with budget (August 2020 update). Cambridge Elevate | Cambridge University Press

80 First Lady Inaugurates NIE Conference: "Education During Crisis: Forging a Path to Quality Learning" - The President's Office (presidencymaldives.gov.mv) 21 November 2020, accessed 1 December 2020.

81 An experience of online teaching and learning of mathematics during the COVID-19; a case study in Thaajuddin School (https://www.facebook.com/EducationMV/, posted 21 November 2020)

82 Supporting parents to boost learning, Seenu Atoll School (Ministry of Education - Republic of Maldives - Home | Facebook, posted 21 November 2020)

83 The software suite incorporating ascEdupage and ascTimetables is developed and provided by Applied Software Consultants, s.r.o., Slovakia. Details are available at https://www.edupage.org/ and https://asctimetables.com/, accessed 18 October 2020, 19 August 2021. The initials s.r.o (Společnost s ručením omezeným) after the names of Slovak businesses indicates limited liability company https://en.wikipedia.org/wiki/Společnost_s_ručením_omezeným/, accessed 19 August 2021.

84 Timetable software used by GN AEC from the AEC's EduPage school admin website (accessed 18 October 2020): https://gnaec.edupage.org/ and https://www.asctimetables.com/

85 Discussion with and demonstration by Ismail Saudulla, Principal GN AEC, and teacher, Mariyam Zumra, 25 October 2020.

86 Observed in an English lesson, Class 8C, in Gnaviyani Atoll Education Centre, 14 October 2020.

87 UNICEF interview.

88 UNICEF interview.

89 UNICEF comment, Mazeena Jameel.

90 UNICEF interview.

91 Kalaafaanu School, Male'.

92 Moosa Adam, Senior Policy Director, MoE, in discussion with Quality Assurance Department, MoE.

93 Initially some teachers started using just Viber, then G-Meet and Google Classroom became more widely used, as teachers learned how to use them and the strategy of using Google Classroom fed through the system.

94 MoE, Filaa Learning Resources.

95 Interview with Hawwa Ruzna, SEN Coordinator, Kalaafaanu School, 21 October 2020.

96 Interview with Adhila Rusheedi, Education Coordinator, DOIE, MoE, 27 October 2020.

97 Quality Assurance Department presentation.

98 MoE, Final ERP action plan with budget.

99 UNICEF, Maldives televised lessons feedback, undated, received 8 December 2020.

100 UNICEF, Guidance note and reviewing matrix for video and televised lessons V7, undated, received 8 December 2020.

101 UNICEF ROSA, Reimagining education – technology for learning, concept note V2.0, Nov 2020, received 8 December 2020.

102 For example, the first modern upper secondary school in Maldives along a western curriculum model, the Science Education Centre, taught Cambridge A Levels in the 1980s.

103 SAR Education COVID-19 – Update #11, 31 August 2020.

104 Interview with Adhila Rusheedi, DIOE, 27 October 2020.

105 Filaa - Home (moe.gov.mv)

106 Maldives case study theme UNICEF ROSA R84 – Access and participation in learning – provision of distance learning. (Cambridge Education, 16 Sept 2020b)

Maldives
Case Study

Situation Analysis on the Effects
of and Responses to COVID-19
on the Education Sector in Asia

This report reviews the impacts of and responses to COVID-19 on education in Maldives, provides reflections on lessons learned so far in the Maldives's COVID-19 response, and analyzes capacity gaps for recovery. It explores successful elements of the Government response, issues and challenges faced, and strategies adopted to continue students' learning during school closure, with an emphasis on the adoption of remote learning methods and technologies. It also looks to the future, in building back better and increasing the resilience of the education system to future shocks.

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