

Report for EdTechHub (ODI)

An overview of emerging country-level responses to providing educational continuity under COVID-19: What's working? What isn't?

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Section 1: Executive summary

Scope of study

This report describes national policy and strategy responses for ensuring educational continuity in the context of widespread school closures implemented as a result of the Covid-19 pandemic. The study focuses on a selection of high-income and low-income contexts deemed to be of greatest interest to the EdTechHub (including key stakeholders from the Department for Education and the Department for International Development). The selected countries regions and countries included in the study are as follows:

- East Asia: China, Japan, Singapore, South Korea
- South Asia: Bangladesh, Pakistan, Nepal
- Sub-Saharan Africa: Kenya, Rwanda, Uganda, Ghana

The research highlights evidence on the current and rapidly changing status of national policy and strategy responses to date. The report examines key themes emerging from these policy and strategic responses and reflects on which are working, and which are not working so well. The nature of the evidence and material available at this stage of the crisis makes firm conclusions hard to reach, but despite this, the report concludes with a set of recommendations supported by the literature as it currently stands.

Key themes

Policy and strategy development are nascent and prioritising access to education following school closures.

Most countries affected by the Covid-19 pandemic are in the process of formulating and implementing their initial responses to school closures in terms of educational provision. The policy and strategy landscape is best described as emerging and fluid, and the available documentation that describes this is 'grey' and often lacking detail. It is difficult to make categorical statements about what is and is not working.

Despite this, it is possible to get a sense of the range of approaches that governments have taken as they attempt to ensure educational continuity. Perhaps unsurprisingly, at this stage in the crisis response, there is little documentation about policy and planning above and beyond the immediate challenge of providing access to education. Notably, this review found little material concerned with how states are designing policy to support teachers, protect the most vulnerable pupils, and continue to ensure that safeguarding is taken seriously.

Centralised systems are better able to take swift action.

The resources collected in this review suggest that more centralised systems have been able to mobilise their responses extremely quickly and have utilised their ability to take rapid action to enact substantial policy changes at short notice. China, South Korea and Uganda provide good examples of this approach.

These centralised approaches do not necessarily come at the expense of a degree of local autonomy. China and South Korea have provided a central educational platform to support distance learning, which includes resources and some guidance and/or training, but schools and teachers have autonomy to plan and deliver remote learning to suit their context, within the guidelines provided. The balance and combination of central direction and action with locally delivered support (at the level of the school) is an important aspect of this approach.

Multi-partner approaches to delivery, including partnerships with the private sector for ICT infrastructure, seem important.

Multi-level and cross-sectoral partnerships appear to be key to a successful and rapid roll-out of remote learning. In general, the focus of such partnerships has been on:

- improving communications infrastructure;
- providing students with (or loaning them) ed-tech equipment, such as tablets;
- subsidising internet access or mobile data;
- developing educational content or making existing content freely available; and
- developing new educational platforms (for example, mobile apps).

Partnerships with multilateral organisations seem to have played an influential role in decision-making in low-income countries during the immediate response.

Delivery mechanisms for remote learning require careful consideration of capacity, existing infrastructure and user access to technologies.

Many governments are leaning towards high-tech solutions over low- or no-tech solutions. Most countries, particularly higher-income countries, are not prioritising anything other than online education, except in one or two cases where TV broadcasting is being used to ensure the hardest-to-reach students have access to education. Even then, this appears to be a short-term solution, with a move to online learning being favoured.

Swift rollouts of educational content should be accompanied by clear messaging.

The rapid decision-making and action taken by many governments has been impressive. Approaches to communicating this rollout have varied. In China, large scale tele-conferences to communicate the rollout of online learning contributed to the consistency of messaging. In other countries, including several in sub-Saharan Africa, where communication of new policy initiatives has largely been through social media channels, the messaging has been less clear.

Further research will be needed to look beyond access to remote education.

Our document review uncovered little focus on the quality of education. The priority has been access. However, a next stage emphasis on *quality* of home schooling will need to follow if school closures are protracted. How to keep children safe, how to support staff, how to engage families and parents, and how to tackle equity are all important areas that have not, as yet, received much attention.

Measuring the impact of policy will be important.

There is an urgent need to review the efficacy of approaches to the monitoring and evaluation of the impact of remote learning policies, both for ongoing decision-making and longer-term learning. Programme pilots, phasing of scale-up operations, and the introduction

of dedicated task forces are all methods currently in use by governments responding to the Covid-19 crisis.

Recommendations

- Learn from policy and strategy development around the world and adapt policy based on data.
- Promote access and reduce costs to learners.
- Prioritise or move towards centralised action, with scope for elements of local autonomy.
- Plan for both the immediate and the long term.
- Ensure remote learning plans are based on the most modest estimate of technological infrastructure and make necessary system upgrades.
- Strive for clarity, decisiveness and support in government action and coherence in donor and geographic coordination.
- Support cross-sectoral collaboration and alliances.
- Consider education equity in relation to all forms of remote education.
- Engage parents and families in home-based education, while recognising that many disadvantaged learners lack effective family support.
- Adopt a learning-focused and adaptive mindset.

Section 2: Evidence and policy

Scope of research

This report analyses national policy and strategy designed to ensure educational continuity in the context of widespread school closures imposed by the Covid-19 pandemic. The study focuses on a selection of countries, including high-income and low-income contexts.

Grouped regionally, the selected countries include:

- East Asia: China, Japan, Singapore, South Korea
- South Asia: Bangladesh, Pakistan, Nepal
- Sub-Saharan Africa: Kenya, Rwanda, Uganda, Ghana

Based on analysis of the current status of national policy and strategy, as well as evidence of planning and implementation for educational continuity, the report:

- draws out implications for policy makers
- provides commentary on national legislative governance structures (for example, national, federal and/or provincial government), evidence of pre-existing infrastructure for delivery of remote learning, the role of multi-stakeholder partnerships for implementation (including with the private sector) and, in the context of low- and middle-income countries (LMICs), the role of multilateral and bilateral partners in supporting the development and provision of educational continuity responses
- comments on the proposed delivery mechanisms for remote learning currently being adopted at national level, drawing out some of the implications of these approaches, particularly in terms of equity and access.
- concludes with reflections on gaps within existing policy and strategy.

Commentary on evidence

At a global level, the majority of affected countries are currently in the process of formulating their initial responses to mitigate the impact of the Covid-19 pandemic on education. At the time of writing, for most countries (the UK included) school closures have only been in effect for the last two or three weeks, and most education systems do not appear to have anticipated or prepared for such measures. The policy and strategy landscape for Covid-19 educational responses – both globally and nationally – is best described as emerging and fluid.

The most valuable sources for gathering relevant and up-to-date information include a series of online knowledge hubs, digital resources and blogs specific to the Covid-19 pandemic, organisational websites, press releases, and social media accounts, plus a range of national digital news media outlets.

Resources that have proved particularly useful include the following:

- Online knowledge hubs:
 - UNESCO's Covid-19 Education Response resource hub: <https://en.unesco.org/covid19/educationresponse>
 - UNICEF's Covid-19 resource hub: <https://www.unicef.org/coronavirus/covid-19>
 - The Inter-agency Network for Education In Emergencies (INEE) Covid-19 resource hub: <https://inee.org/covid-19/resources>
 - ReliefWeb's Covid-19 resource hub: <https://reliefweb.int/topics/covid-19>
 - The Global Education Monitoring (GEM) Report World Education blog: <https://gemreportunesco.wordpress.com/>
 - The Wikipedia page on coronavirus impact on education: https://en.wikipedia.org/wiki/Impact_of_the_2019%E2%80%9320_coronavirus_pandemic_on_education
 - Hundred's Covid-19 Education Response resource hub: <https://hundred.org/en/collections/quality-education-for-all-during-coronavirus>
 - The World Bank's Covid-19 Remote Learning resource hub: <https://www.worldbank.org/en/topic/edutech/brief/edtech-covid-19>

- For gathering more detailed information on state and multilateral strategic response planning at country level, UNICEF and other agency country offices have proved particularly valuable partners (particularly in the context of LMICs).

- For gathering additional information on the implementation of educational responses at country level, social media has also proved to be a helpful and up-to-date resource, identifying what measures national governments, NGOs, INGOs and other partners are currently undertaking to support home learning. Specifically, we refer to Twitter and, to a lesser extent, Facebook.

There is as yet no substantial body of published literature that provides a comprehensive overview of the system-level measures taken to date, either globally or nationally. There is also no published evidence on the impact or effectiveness of the responses that have been implemented. Therefore, any statements regarding what appears to be working in terms of policy and strategy are based largely on evidence of *progress* and *action*, rather than evidence of *impact* and *outcome*.

Themes

Based on the information and evidence gathered, several themes have emerged in relation to national policy and strategy for educational continuity planning and implementation.

1. National policy and strategy for educational continuity planning in response to Covid-19 is at an nascent stage worldwide

At the time of writing, for the majority of countries worldwide, school closures have only been in effect within the last two-to-three weeks, and the majority of education systems did not anticipate or prepare for such measures. In this context, the policy and strategy landscape for Covid-19 educational responses – both globally and nationally – is best described as emerging and fluid. Many countries are still in the process of formulating their initial responses to the impact of the pandemic on education, and new measures for educational delivery are being taken on an emerging day-by-day and week-by-week basis.

In Bangladesh, for example, following school closures on 18 March, the Ministries of Education (MoE) and Primary and Mass Education (MoPME) are still preparing comprehensive Covid-19 Response Plans.¹ Both institutions have promoted the delivery of home schooling via a television-based national remote schooling model, which has been in operation since 28 March. Similarly, the Kenyan Ministry of Education has not published an educational response plan, but has implemented a multi-platform home schooling model using television, radio, online resources and, in some cases, live video-schooling, in partnership with the Kenya Institute of Curriculum Development (KICD).²

In Uganda, although further detail is required on the immediate education response plan, the Ministry of Education and Sports is currently working with UNICEF to develop an accelerated learning programme to benefit all learners when schools reopen.³ The Ministry of Education and Sports has announced plans to shorten school holidays to make up for lost time as a result of the disruption caused by the disease.⁴

¹ Personal communication from Golam Kibria, Education Head of Section, DfID Bangladesh M-Kibria@DFID.gov.uk

² Kenya Ministry of Education (2020). Twitter post. [Online]. Accessed at: from: <https://twitter.com/EduMinKenya/status/1240221103794069504>; China News, (2020). Feature: Kenyan students find respite in digital learning amid COVID-19 outbreak. 14thApril 2020.[Online]. Accessed at: http://www.china.org.cn/world/Off_the_Wire/2020-04/14/content_75927622.htm

³ UNICEF Uganda (2020). UNICEF scales up support in 145 countries to keep children learning, as COVID-19 forces majority of schools worldwide to close. Press release. 26thMarch 2020. [Online]. Accessed at: <https://www.unicef.org/uganda/press-releases/unicef-scales-support-145-countries-keep-children-learning-covid-19-forces-majority>

⁴ Ministry of Education and Sports Uganda. Twitter post. 5thApril 2020. [Online] Accessed at: https://twitter.com/Educ_SportsUg/status/1246696830810939393

In other contexts, available policies or accounts of interventions are lacking in detail. In Nepal, the government has produced the Covid-19 Education Cluster Contingency Plan, which highlights a multi-media approach to delivery of remote learning and school support.⁵ The plan prioritises the initial need for a comprehensive assessment of nationwide technological capacity before this approach can be implemented.⁶

In Japan, while school closures have been in force since 24 February, they have taken the form of an extended holiday, rather than a transition to home schooling. The Japanese government only announced its intention to keep schools closed on 7 April and reports state that its policy and planning with regards to online schooling is still emergent.⁷ Similarly, in Ghana, details and measures to support home-based learning have not yet been published, which could be a result of a scheduled four-week holiday period that started in April.⁸

It is important that the emerging policy and strategy developments around the world are tracked, as this will enable the identification of effective approaches for staging interventions and preparing for a return to school. It is also important to draw on the evidence of approaches used by those countries who were impacted by the pandemic from an earlier date.

China's experience will be particularly valuable. In its early response to school closures, the Chinese Ministry of Education focused on establishing the delivery of remote learning via online mechanisms.⁹ Its approach to implementation was based on three integrated priorities: i) ensuring the right teaching and learning content was available; ii) ensuring that this content could be accessed by users for free; and iii) ensuring that appropriate delivery infrastructure and bandwidth was in place to guarantee large numbers of students could access this content. The Chinese government worked cross-governmentally and with internet providers and support companies to ensure that the selected online education platforms had their systems upgraded to handle the increased traffic.¹⁰

The Chinese authorities sought to refine this basic delivery model over time. Further strategic interventions have been identified based on a multifaceted approach intended to

⁵ Nepal Education Cluster (2020). *COVID-19 Education Cluster Contingency Plan, 2020, March 2020*. Kathmandu: Nepal Education Cluster.

⁶ Ibid.

⁷ The Minchi (2020). Editorial: Amid school closures, Japan must quickly utilize online teaching tools. The Minchi. 13th April 2020. [Online]. Accessed at:

<https://mainichi.jp/english/articles/20200413/p2a/00m/0na/005000c>

⁸ Public Holidays Global (2020b). Ghana School Holidays 2020. [Online]. Accessed at:

<https://publicholidays.africa/ghana/school-holidays/>

⁹ Huang et al. (2020). Handbook on Facilitating Flexible Learning During Educational Disruption: The Chinese Experience in Maintaining Undisrupted Learning in COVID-19 Outbreak. Beijing: Smart Learning Institute of Beijing Normal University https://inee.org/system/files/resources/Handbook-on-Facilitating-Flexible-Learning-in-COVID-19-Outbreak_0.pdf

¹⁰ UNESCO (2020a) How is China ensuring learning when classes are disrupted by coronavirus? 19th February 2020 [online]. Accessed at: <https://en.unesco.org/news/how-china-ensuring-learning-when-classes-are-disrupted-coronavirus>

ensure successful online teaching through the provision of seven inter-related elements. Widely recognised as key enablers in remote online schooling, these include: i) a reliable ICT-based communications infrastructure; ii) coordinated access to suitable digital learning resources; iii) user-friendly digital learning tools; iv) pedagogic and instructional design based on effective learning methods; v) coordination of online delivery by instructional organisations; vi) provision of effective support services for teachers and learners; and vii) close cooperation between governments, enterprises and schools.¹¹

2. National governance and legislative structures impact on strategic decision-making

At a national level, the legislative framework for governance may impact on the speed and effectiveness with which countries are developing and implementing their educational continuity plans. Those with strong centralised legislative bodies or decision-making committees (for example, China, South Korea, Singapore, Bangladesh, and Uganda) currently have more fully developed strategies and implementation plans, arguably as a result of swiftly moving bureaucratic powers and substantial institutional capacity. Those with federal, provincial, or decentralised legislative models (for example, Japan, Nepal, and Pakistan) have markedly less developed policies and strategies, as well as less evidence of actual delivery of remote education.

Japan has been subject to criticism for a slow response to Covid-19¹². The government's policy response is hindered by Japanese law, which prohibits central government from imposing severe lockdown measures.¹³ Any central government policy announcements are primarily offered as guidance to individual prefectures in order to support decision-making at the sub-national level. In Pakistan, while the Federal Ministry of Education and Professional Training (MoEPT) has identified continuity of learning and communication as priority areas in the first phase of the response to the Covid-19 pandemic, evidence suggests that decision-making and strategic responses to educational continuity have taken place at the level of provincial government, rather than federal government.¹⁴

Conversely, China's largely centralised system (politically, at least) has allowed for swift action. Initial policy and planning was conducted over an intensive two-week period of central government engagement with public and private sector organisations, followed by a series of teleconferences to filter plans for implementation down to the local level, including

¹¹ Huang et al. (2020).

¹² Pesek, W. (2020). Japan's coronavirus response is too little, too late. Washington Post. 10th April 2020. [Online]. Accessed at: <https://www.washingtonpost.com/opinions/2020/04/10/japans-coronavirus-response-is-too-little-too-late/>

¹³ McCurry, J. (2020). Japan declares state of emergency over coronavirus. The Guardian. 7th April 2020. [Online]. Accessed at: <https://www.theguardian.com/world/2020/apr/07/japan-shinzo-abe-declares-state-of-emergency-over-coronavirus>

¹⁴ Wikipedia (2020b). 2020 coronavirus pandemic in Pakistan. [Online]. Accessed at: https://en.wikipedia.org/wiki/2020_coronavirus_pandemic_in_Pakistan

communications to individual school and teacher level.¹⁵ The evidence available suggests that this was largely effective for getting the system of online schooling ‘up and running’. The government’s strategy for subsequently filling gaps in content, equity of provision or improving quality appears less clear. It is also unclear whether these refinements have been managed at a national or local level.

3. Multilateral agencies and donor coordination are key to supporting decision-making in LMICs

Within LMIC contexts, the active roles of multilateral agencies and donor coordination groups appear key to supporting government and other stakeholder institutions in developing and implementing coordinated strategies for educational continuity. Multilateral organisations, particularly UNICEF, are partnering with education ministries in Kenya, Rwanda, Uganda and Bangladesh, with evidence of reasonable progress in strategic planning and/or implementation for educational continuity. In these contexts, there is also evidence of emerging donor-led models for organisational coordination through committees, but this is not always the case. In Nepal, donor support for the government is co-ordinated through the Education Cluster, and the Cluster’s subsequent plans for educational provision under lockdown required substantial strengthening.¹⁶

In Uganda, the government response seems to have benefited from coordinating the response with donors and development partners by extending the coverage of support that is available for continuous learning, especially with regard to low- and no-tech measures.¹⁷ For instance, the Belgian Development Authority, Enabel, committed to support the National Teachers’ Colleges for continuous personal development with online training to boost ICT skills and computer-based learning. Meanwhile, Teach for Uganda have begun ‘SMS Teaching’ to reach learners without access to internet, newspapers are including educational content as pull-outs, and UNICEF are working with other partners to develop radio-based learning materials and online learning platforms.¹⁸

UNICEF are also working with the Rwanda Education Board (REB) and numerous other partners to develop, produce and air 48 hours of radio lessons that are aligned with the

¹⁵ UNESCO (2020a). How is China ensuring learning when classes are disrupted by coronavirus? 19th February 2020 [Online]. Accessed at: <https://en.unesco.org/news/how-china-ensuring-learning-when-classes-are-disrupted-coronavirus>

¹⁶ Nepal Education Cluster (2020).

¹⁷ UNICEF Uganda (2020).

¹⁸ Enabel in Uganda (2020). Twitter post. 15th April 2020. [Online] Accessed at: <https://twitter.com/EnabelinUganda/status/1250323073758195712>; Examples of solutions for reaching students with limited access to the internet can be found in Aladin, K. (2020). Reaching Children & Students in Remote Locations. Hundred. [Online] Accessed at: <https://hundred.org/en/innovations/reaching-children-students-in-remote-locations>; Mutegeki, G. (2020). COVID-19: How to keep your child engaged during the lockdown. New vision. 6th April 2020. [Online] Accessed at: https://www.newvision.co.ug/new_vision/news/1517608/covid-19-child-engaged-lockdown; UNICEF Uganda (2020)

national curriculum, as well as ten hours of television programming.¹⁹ Videos will include sign language interpretation and accessibility features will form part of the e-learning platform to ensure accessible remote learning for children with certain disabilities.²⁰

In LMIC contexts where partner organisations are operating largely as bilateral partners only, or where capacity for partner coordination appears weak, national policies and strategies are less fully developed. In Pakistan, for example, evidence suggests that both UNICEF and the World Bank are working independently with federal and provincial governments to formulate a range of standalone responses in different contexts.²¹ At this stage, their overall range of identified solutions and implemented activities appear fragmented and limited in scope.

4. Cross-sectoral partnership, including with the private sector, is key to facilitating delivery of technology-led solutions to home schooling

In jurisdictions where governments have sought to work across ministries and departments, and where they have worked in close partnership with the private sector, there is evidence of progress in the delivery of remote learning through media-based modalities.

The Chinese response was based on enhanced cross-sectoral collaboration within government (i.e. between the Ministry of Education and the Ministry of Industry and Information Technology), between government and the private sector (for example, internet providers and technology firms) and, finally, within the state education sector itself. Throughout the education response planning process, central government engaged with all levels of the system to ensure the smooth implementation of a rapidly developed policy. Key interventions included holding several teleconferences with local level officials and large-scale training and information teleconferences for education practitioners.²²

In Bangladesh, the delivery of the country's current remote learning response has involved collaboration between a wide range of government departments, including the Ministry of Education (MoE), the Directorate of Secondary & Higher Education (DHSE), the Ministry of Primary & Mass Education (MoPME), the Ministry of Information & Communications Technology – and, in particular, the a2i ('Access To Information') unit, which had a key strategic role.²³ To date, these agencies have also partnered with state- and non-state broadcasters, and will draw in working group partnerships with the private sector, including

¹⁹ From personal contact with UNICEF Rwanda

²⁰ UNICEF Rwanda (2020). Radio learning in the time of Coronavirus. News note. 13th April 2020. [Online]. Accessed at: <https://www.unicef.org/rwanda/stories/radio-learning-time-coronavirus>

²¹ Yousafzai, A. (2020). WB, UN bodies helping Pakistan minimise educational disruption amid COVID-19 crisis. The News [online]. 31st March 2020. Accessed at: <https://www.thenews.com.pk/print/637068-wb-un-bodies-helping-pakistan-minimise-educational-disruption-amid-covid-19-crisis>

²² UNESCO (2020a)

²³ Personal communication from Golam Kibria, Education Head of Section, DfID Bangladesh M-Kibria@DFID.gov.uk

commercial radio, mobile phone service providers and internet providers as part of future plans.²⁴

In Rwanda, the Ministry of Education and the Rwanda Education Board (REB) have partnered with telecommunication platforms and UNICEF (amongst other development partners) to ensure learners (pre-primary, primary, secondary and tertiary) have free access to online educational materials.²⁵ Telecommunication companies, MTN Rwanda and Airtel Rwanda, are supporting university and polytechnic students' home learning by providing free data and internet packages to access these materials through their computers or mobile phones.²⁶ In Kenya, the Ministry of Education has also partnered with telecommunication companies to broadcast educational content on radio and television. The Chinese tech firm, Huawei, is supporting the coordination of internal Kenyan government communications by providing video conferencing equipment.²⁷

In Ghana, universities have partnered with Vodafone and MTN Ghana to ensure that lecturers are not charged to use Zoom videoconferencing software to record and upload lectures. In addition, the University of Ghana has agreed a deal with Vodafone to distribute SIM cards with five gigabytes of data to its students, to enable them to access online educational content.²⁸

In South Korea, cross-sectoral collaboration has been used to address issues of equity. As part of its emerging policy and planning for nationwide online education, the government has conducted a national 'roll call' of technology available in the home. The intention is to understand where there is a need to target resources so that every student can access

²⁴ Sarkar, S. (2020). Attending classes on TV screen. The Financial Express. 6th April 2020. [Online]. Accessed at: <https://thefinancialexpress.com.bd/views/attending-classes-on-tv-screen-1586186174>

²⁵ Ministry of Education, Rwanda (2020). Twitter post. [Online]. Accessed at: https://twitter.com/Rwanda_Edu/status/1242512348595830785; Republic of Rwanda, Ministry of Education (2020). Students should embrace eLearning amidst schools' closure due to COVID 19. [Online]. Accessed at: https://mineduc.gov.rw/index.php?id=113&tx_news_pi1%5Bnews%5D=1208&tx_news_pi1%5Bcontroller%5D=News&tx_news_pi1%5Baction%5D=detail&cHash=329f42837aefc26bfab8dcd3a807a7e7

²⁶ Mbonyinshuti, J. (2020). Telecom companies provide free access to online learning. University World News. 1st April 2020. [Online]. Accessed at: <https://www.universityworldnews.com/post.php?story=20200401082400876>

²⁷ Ministry of Education of the Republic of Kenya. (2020b). Twitter post. [Online] Accessed at: <https://twitter.com/EduMinKenya/status/1246042653734637568>

²⁸ Mohammed, W.F. (2020). What COVID-19 reveals about educational inequality in Ghana. Al Jazeera English. 7th April 2020. [Online]. Accessed <https://www.aljazeera.com/indepth/features/covid-19-reveals-educational-inequality-ghana-200407100729985.html>; Ferdinand, E. (2020). KNUST suggests September 2020 for WASSCE, 'rejects' Entrance Exams for Prospective Students amidst COVID-19 Pandemic. Education Ghana. 10th April 2020. [Online] Accessed at: <https://educationghana.net/index.php/2020/04/10/knust-suggests-september-2020-for-wasscerejects-entrance-exams-for-prospective-students-amidst-covid-19/>

online content. A national technology loan scheme has now been established in collaboration with private sector and NGO partners²⁹.

Finally, in Pakistan, the Government of Punjab's Online Teaching Program, launched on 1 April, is a collaboration between the School Education Department, its Program Monitoring and Implementation Unit (PMIU), and the Punjab IT Board (PITB), together with an internet service provider and a commercial cable TV channel.³⁰

5. Pre-existing infrastructures for remote learning may influence the speed of responses to home schooling

Evidence suggests that the presence of a pre-existing national infrastructure for the delivery of remote learning, particularly via broadcast or online media, has influenced the speed with which countries have been able to deliver high-visibility home schooling interventions.

Bangladesh has a substantial recent history of using broadcasting and other multimedia approaches in the delivery of remote and/or distance learning. In the last decade, these have proved highly successful in mobilising access to and participation in remote learning at scale. Key examples include the innovative range of BBC Janala learning products (television and radio programming, mobile apps, newspaper columns, and community learning groups), which were designed to support the engagement of the general public in English language learning³¹, and the English In Action programme, funded by DfID between 2008 and 2018. The latter involved the innovative use of mobile phones to support the professional development of primary teachers through the creation and sharing of audio, video, and print-based resources associated with classroom teaching³². In the case of BBC Janala, the education continuity plan's prioritisation of television broadcast would appear to reflect the impact of these previous initiatives. BBC Janala's additional model of working with six mobile phone networks to ensure either free or reduced data costs for educational material is also likely to be important to future components of the government's educational continuity planning.

In Uganda, an e-learning platform was made freely accessible to all six days after the government announced the closure of schools. The platform was developed by UNICEF and other partners in 2019, and also facilitated offline content.³³

²⁹ Bicker, L. (2020). Coronavirus: How South Korea is teaching empty classrooms. BBC News. 10th April. 2020. [Online]. Accessed at: <https://www.bbc.co.uk/news/world-asia-52230371>

³⁰ Government of Punjab. (2020). Taleem Ghar. [Online]. Accessed at: <https://taleemghar.punjab.gov.pk/>

³¹ BBC Media Action. Millions of Bangladeshis learn English with BBC Janala. [Online]. Accessed at: <https://www.bbc.co.uk/mediaaction/where-we-work/asia/bangladesh/bbc-janala>

³² English in Action (2020). [Online]. Accessed at: <https://www.eiabd.com/>

³³ UNICEF Uganda (2020).

In East Asia, the Singapore government's response rests on a longstanding history of delivering ed-tech initiatives.³⁴ While the details on the move to full homebased learning delivery have still to emerge, it is clear that the system is well equipped to deliver education in a way that has ed-tech at the centre of its approach.

Indeed, the Ministry of Education (MoE) in Singapore has launched many ed-tech initiatives over the past 25 years. These have been underpinned by the release of a series of ICT masterplans, which specify both the guidelines for ed-tech projects and, most critically, the educational objectives that these projects are to be measured against.³⁵ A number of previous policy and reform goals are of particular interest in the context of this report, specifically:

- The introduction of ed-tech as a means of learning rather than a discrete subject
- The development of ed-tech infrastructure in schools with a strong ratio of teachers and students to equipment
- The use of ed-tech for assessment
- Provision of teacher training in creative and innovative use of technology for effective teaching
- A focus on self-directed learning.

While it is too early to assess the effectiveness of the Singapore MoE's online education response, it is likely that these underpinning masterplans will have contributed to ensuring at least some level of success. Understanding the impact of the response and the links to previous policy may be important areas of enquiry for future research on education provision in response to Covid-19.

6. Current strategic planning is prioritising high-tech solutions, possibly at the cost of equity and access for all

Within the published documentation analysed in this study, there is a clear prioritisation of high-tech approaches to remote learning for children out of school. This is apparent not only in higher-income or higher-resourced settings, such as China, Singapore, and South Korea, but also low-income and low-resource settings. In sub-Saharan Africa, Kenya, Rwanda, Ghana and Uganda have all implemented, at least in part, an internet-based approach to home learning. In Bangladesh, the initial response to home schooling is television broadcasting, with planning for radio, mobile phone and internet provision currently underway. In Nepal, while planning is in early stages, there is a similar emphasis on developing multi-media solutions to home schooling, even in a context where the national technological capacity is still not fully known.³⁶

³⁴ From personal contact with Edmond Gaible, Natoma Group

³⁵ Ibid.

³⁶ Nepal Education Cluster (2020).

Interestingly, there is little or no emphasis on low-tech or no-tech solutions³⁷ within national planning documentation. Nepal's Education Cluster response plan (Nepal Education Cluster 2020) mentions 'self and peer learning supported by print-based learning resources, including library books' but does not discuss delivery mechanisms in any further detail.³⁸ Low-tech and no-tech delivery approaches are reportedly being developed as part of current planning in Kenya, Rwanda, Uganda and Ghana, but as yet are not presented as priorities. In China, where the response is focused mainly on online provision, there is some mention of TV-based learning for those in hard-to-reach areas.³⁹ There is a sense that this was intended to be a temporary measure as internet connectivity is improved nationwide (i.e. as part of the government's collaboration with private sector communications firms).⁴⁰ In Pakistan, Aga Khan Education Services, a key non-state provider of primary, secondary and tertiary education, is acknowledging that remote learning is a significant challenge in locations with poor internet connectivity and mobile phone coverage. In this context, there are reports of school staff providing carefully designated pick-up and drop-off points for print-based assignments.⁴¹

The general prioritisation of higher-tech solutions in educational continuity planning might impact on equity of access, regardless of context. It also presents a particular challenge in LMICs. For instance, while Bangladesh is endeavouring to use TV, radio, mobile phone and internet platforms to reach a maximum number of students, only 33% of people in the region have internet access, and only 43.9% of households in rural Bangladesh own a television.⁴² Similarly, only 35% of rural Nepalis have access to television.⁴³ In Ghana, the impracticalities of regional differences in access to reliable energy supplies are likely to even disrupt low-tech measures, including radio broadcasts.

Importantly, the South Korean government has tried to address equity issues by providing tech-specific support to low-income families, helping with the costs of internet so that their children still have the opportunity to learn while at home.⁴⁴ Further equity-focused interventions have been made in collaboration with the charitable sector, through support for a computer equipment-lending service. Various charities have been supporting this measure,

³⁷ Tech requiring connectivity would be considered high-tech. Low-tech and no-tech solutions primarily refer to paper-based learning packs and physical resources that can be distributed to learners. Radio and television broadcasting might be considered mid- or low-tech as they require hardware which may be widely but not universally available and accessible.

³⁸ Nepal Education Cluster (2020).

³⁹ UNESCO (2020a).

⁴⁰ Huang et al. (2020).

⁴¹ Aga Khan Development Network (AKDN) (2020). AKDN pulls together in response to the COVID-19 pandemic. [Online]. Accessed at: <https://www.akdn.org/project/akdn-pulls-together-response-covid-19-pandemic>

⁴² UNICEF Bangladesh (2020b). UNICEF: Urgent need to secure learning for children across South Asia. Press Release. 6th April 2020. [Online]. Accessed at: <https://www.unicef.org/bangladesh/en/press-releases/unicef-urgent-need-secure-learning-children-across-south-asia>

⁴³ Ibid.

⁴⁴ Bicker, L. (2020).

alongside additional interventions to support low-income families and those worried about the implications of home schooling.⁴⁵

7. Ensuring the quality of learning as well as continuity of access to education

The role of parents in home schooling

There is a general recognition that parents have a key role to play – firstly, in facilitating engagement with home schooling, and secondly, in providing academic support to their children. In this regard, collaboration and communication with parents has been a key aspect of strategic planning.

The South Korean government has tried to ensure buy-in for a widespread home schooling approach by providing subsidies to support those who must stay at home from work with children due to school closures.⁴⁶ The Japanese government's initial response included measures to ensure that parents of children affected by school closures were able to take time off in order to look after them. Specifically, the government ensured that funds were available to compensate these parents for any unpaid leave taken, thus supporting parents on lower incomes⁴⁷.

In Bangladesh, it is reported that a2i is leading state-sector planning for an education communication strategy to ensure that parents and caregivers are aware of and can engage children in the scheduled learning processes.⁴⁸ UNICEF's Covid-19 response plan also advocates for the provision of information to parents and caregivers on how to support and engage with their children's learning, make learning interactive, engage parents and learners, monitor engagement and ensure assessment.⁴⁹ Similarly, UNICEF in Pakistan is supporting the Ministry of Education & Professional Training (MoEPT) in disseminating education-related messages, targeting parents, to encourage their children to continue learning.⁵⁰

The role of teachers in home schooling

⁴⁵ Ibid.

⁴⁶ Dudden, A., and Marks A. (2020). South Korea took rapid, intrusive measures against COVID-19 – and they worked. The Guardian. 20th March 2020 [Online]. Accessed at: <https://www.theguardian.com/commentisfree/2020/mar/20/south-korea-rapid-intrusive-measures-covid-19>

⁴⁷ Chappell, B. (2020) Coronavirus Updates. NPR. 27 February 2020 [Online]. Accessed at: <https://www.npr.org/sections/goatsandsoda/2020/02/27/809984502/coronavirus-update-japan-is-closing-all-its-schools-for-a-month?t=1586853616816&t=1586863350265&t=1587056787206>

⁴⁸ Personal communication from Golam Kibria, Education, DfID Bangladesh M-Kibria@DFID.gov.uk

⁴⁹ UNICEF Bangladesh (2020a). UNICEF scales up support to keep children learning, as COVID-19 forces schools to close. 27th March 2020. [Online]. p. 8-9. Accessed at:

<https://www.unicef.org/bangladesh/en/press-releases/unicef-scales-support-keep-children-learning-covid-19-forces-schools-close>

⁵⁰ UNICEF Pakistan. (2020). Pakistan COVID-19 Situation Report 23rd-29th March. Islamabad: UNICEF.

[Online]. Accessed at: <https://reliefweb.int/report/pakistan/pakistan-covid-19-situation-report-reporting-date-23-29-march-2020>

Planning, policy and strategic documents often lack clarity on the role of teachers in home schooling. However, there are some notable exceptions, where a key role for teachers is both highlighted and expected.

In South Korea, the Ministry of Education has published documentation setting expectations for teachers in relation to remote learning, including guidance about how they are to set assignments and comment on work. It has established the 'Teacher On' initiative, a remote community of practice for teachers to share examples of good practice in online teaching and learning, led by volunteers with existing experience of remote learning. In addition, the MoE has announced the development of the '10,000 Communities' online platform for teachers to share good practice.⁵¹

In Singapore, the Ministry of Education has stated that teachers are expected to maintain contact with and provide support to parents and students throughout the lockdown period, stating that they will either work from home or from the school in order to do so.⁵²

In Kenya, in the development and distribution of home learning resources, both the Ministry of Education and Kenyan Institute of Curriculum Development (KICD) have made clear that the resources themselves are supplementary to the role of teachers. They have also indicated that teachers can apply to become 'resource persons' to update home schooling resources.⁵³ However, little else has been published on how teachers can support home learning. As part of its national response strategy, UNICEF Kenya (2020) also advocates for developing the role of teachers and headteachers in supporting the continuity of learning.

In Rwanda, while the role of teachers in supporting home learning has not yet been confirmed, the Ministry of Education has encouraged teachers to 'train themselves' and continue learning outside of school.⁵⁴ A teachers' credit and savings cooperative has announced plans to provide financial support to teachers affected by Covid-19 through a loan to cover any losses in salary.⁵⁵ Meanwhile, selected teachers in Uganda will use local radio and television stations to deliver lessons.

⁵¹ Korean Ministry of Education (2020). The New School Year Begins with Online Classes. MOE Press Release. 13th April 2020. [Online] Accessed at:

<http://english.moe.go.kr/boardCnts/view.do?boardID=265&boardSeq=80297&lev=0&searchType=null&statusYN=C&page=1&s=english&m=0301&opType=N>

⁵² Ministry of Education. Singapore Government. (2020c). Schools to Implement One Day of Home-Based Learning a Week. Press release. 27th March 2020. [Online]. Accessed at:

<https://www.moe.gov.sg/news/press-releases/schools-to-implement-one-day-of-home-based-learning-a-week>

⁵³ Kenya Institute of Curriculum Development (2020). Twitter post. [Online] Accessed at:

<https://twitter.com/KICDKenya/status/1246862620797341696/photo/1>

⁵⁴ Rwanda Education Board (2020). Twitter post. [Online] Accessed at:

<https://twitter.com/REBRwanda/status/1247185572885602307>

⁵⁵ Sacco, U. (2020). Twitter post. [Online] Accessed at:

<https://twitter.com/MwalimuSacco/status/1247971001964560385>

Assuring the quality of home-schooling provision

Opportunities to test, learn from and adapt home schooling provisions are evident in Singapore and South Korea. In Singapore, the nationwide school closures were preceded by a one-day-per-week home schooling pilot program, to allow parents, teachers, students to get used to home schooling arrangements.⁵⁶ The pilot also provided opportunities for the Singaporean ministry to understand how a scaled-up version of the policy might work.

In South Korea, the ministry has announced a phased model to deliver online classes at scale, with third-year middle and high school students beginning their online term on 9 April. Other grades are due to follow on the 16 and 20 April, respectively.⁵⁷ Though it is not explicitly stated, it is possible that this approach may represent an attempt by the MoE to utilise a ‘test, learn, adapt’-style approach, using lessons from the early stages of the rollout to inform tweaks and adaptations to the policy and the online platforms as the classes are scaled up to the wider community of school students.⁵⁸

The South Korean ministry has announced the creation of an online class preparation and monitoring team whose mandate is not only to support implementation of the immediate policies on the ground, but also to monitor their effectiveness and respond to issues and challenges on an ongoing basis.⁵⁹ In addition, the MoE are reportedly setting up an ed-tech task force within the ministry to devise a mid- to long-term strategy for education provision in the second half of this year.⁶⁰

It is also possible that this approach is being adopted in China. Officials there have similarly stated that a monitoring and evaluation team will be put in place to understand the efficacy of online learning methods, to inform future policy.⁶¹

Strategies for supporting the most vulnerable

Strategies to support the most vulnerable have not been fully addressed in the evidence gathered by this review. As discussed, the prevalence of technology and media-driven remote learning models present a challenge to equity, particularly in low-resource settings.

Based on available government documentation, reaching the most vulnerable seems to be regarded as a priority for NGOs rather than for governments. In Bangladesh, for example, it

⁵⁶ Singapore Ministry of Education (2020) Schools to implement one day of home-based learning a week. MOE press release. 27th March [Online] Accessed at: <https://www.moe.gov.sg/news/press-releases/schools-to-implement-one-day-of-home-based-learning-a-week>

⁵⁷ Ministry of Education, Republic of Korea (2020). Official Facebook page @ourmoekr, 13th April 2020. [Online] Accessed at: <https://www.facebook.com/ourmoekr/>

⁵⁸ Bahk, E. (2020). Online class platforms plagued with malfunction. Korea Times. 15th April 2020. [Online]. Accessed at: https://www.koreatimes.co.kr/www/nation/2020/04/181_287871.html

⁵⁹ Korean Ministry of Education (2020) All schools postpone the new school year. MOE press release 13th April 2020 [Online]. Accessed at: <http://english.moe.go.kr/boardCnts/view.do?boardID=265&boardSeq=80295&lev=0&searchType=null&statuYN=W&page=1&s=english&m=0301&opType=N>

⁶⁰ Ibid.

⁶¹ Huang et al. (2020).

is stated that SCI and BRAC have received US\$1.5 million from the emergency education fund to support the Covid-19 education response in the Rohingya refugee camps at Cox's Bazar.⁶² In addition, UNICEF Bangladesh have published a separate and specific education response strategy for the camps, and are currently supporting the provision of print-based materials for parent-led teaching in those contexts.⁶³

Strategies for safeguarding

There is emerging evidence of communications regarding safeguarding in remote education, although these are often focused on online learning. That said, there is also evidence of plans for the inclusion of psychosocial support and messaging within home schooling programming in Nepal and Pakistan. In Bangladesh, psychosocial support programming is being developed as part of the current television-based programming.⁶⁴ In addition, it is stated that an education communication strategy for safeguarding is under development, focussing on an online safeguarding campaign and the dissemination of relevant protection messages to parents and children. UNICEF Bangladesh's Covid-19 response plan also advocates for strengthened child protection and social care initiatives.⁶⁵

It appears that comprehensive strategies and guidelines for safeguarding under home schooling are yet to be circulated.

Continued nutrition support

As with safeguarding, specific strategies for the provision of continued nutrition support is largely absent from education strategy statements. In South Korea, the MoE has announced policy measures to support parents and students through school closures, including the provision of four months' worth of food vouchers to eligible households. There is also some evidence of other state interventions for continued nutrition support under Covid-19, including subsidized rice in Bangladesh.

In addition, although the government of Uganda has not specifically announced measures to provide nutritional support for children, it has organised food relief packages for 1.5 million people in urban poverty in Kampala and Wakiso. These include salt, six kilos of maize flour, and three kilos of beans per person.⁶⁶ Additional supplies have been given to mothers that are breastfeeding.⁶⁷ Moreover, the government has implemented measures to revoke the trading licences of food sellers that increase their prices in response to restricted movement

⁶² Personal communication from Golam Kibria, Education Head of Section, DfID Bangladesh M-Kibria@DFID.gov.uk

⁶³ UNICEF Bangladesh, (2020b). p. 9

⁶⁴ Personal communication from Golam Kibria, Education, DfID Bangladesh M-Kibria@DFID.gov.uk

⁶⁵ UNICEF Bangladesh (2020a).

⁶⁶ Rugunda, R. (2020). Twitter post. [Online] Accessed at: <https://twitter.com/RuhakanaR/status/1245363149009825794>

⁶⁷ Ibid.

measures.⁶⁸ The Rwandan government has also introduced measures to tackle vendors selling overpriced goods.⁶⁹

Strategies for public health support

In the context of the pandemic, public health messaging is frequently included in both educational provision and education-focused public service communications to parents and children. The distribution of content and messaging on social distancing, hygiene and isolation feature in the strategies in Pakistan, Nepal, and Bangladesh.⁷⁰ In its interventions in Pakistan, the World Bank is including a comprehensive communication campaign for schools, parents and children on key hygiene practices and advice on how to protect themselves and others from the spread of the disease.⁷¹

Across all countries featured in this study, there is no evidence of wider non-Covid-19 public health strategies featuring in current educational response planning.

⁶⁸ Museveni, Y. (2020). Twitter post. [Online] Accessed at:

<https://twitter.com/KagutaMuseveni/status/1242696269782487040>

⁶⁹ Rwanda Broadcasting Agency (2020). Twitter post. [Online] Accessed at:

<https://twitter.com/rbarwanda/status/1239266628971495424/photo/1>

⁷⁰ UNICEF Pakistan (2020); Nepal Education Cluster (2020); UNICEF Bangladesh (2020a).

⁷¹ World Bank. (2020b). Pakistan - COVID-19 Pandemic Response Effectiveness Project. [Online]. Accessible at: <http://documents.worldbank.org/curated/en/651371585953227830/Pakistan-COVID-19-Pandemic-Response-Effectiveness-Project>

Section 3: Recommendations for policymakers

1. Learn from policy and strategy development around the world and adapt policy based on data

Policymakers should follow and learn from the steps taken in other countries, drawing on evidence from countries that were impacted by the pandemic at an earlier stage, where possible. Adopting an adaptive, data-driven policymaking approach will support success in the longer term. Such approaches are essential in a rapidly changing policy context.

2. Promote access and reduce costs to learners

Online learning can incur costs for students. In many instances, charges for internet connectivity will prevent students in marginalised groups from participating in online learning. Such costs could, as in China, be reduced by government collaboration with internet service providers and other telecommunications companies.

3. Prioritise or move towards centralised action, with scope for an element of local autonomy

Centralised systems appear more able to act quickly and decisively, and the country responses analysed in this report suggest that this is a good thing. Centralised action does not preclude some autonomy: agile local responses are a vital element of education continuity planning and can sustain support for learners, focus school and teacher action, and underpin good pedagogy for remote learning.⁷²

4. Plan for both the immediate and the long term

There is a need for twin-track planning – responding to the immediate crisis while planning for the long term. Initiatives undertaken in response to Covid-19 will impact participation in education after the pandemic has eased and schools have re-opened. Long-term planning should include approaches to teacher development, resource development, agreements with service operators, and other factors that will have value and utility over time.

5. Ensure that remote learning plans are based on the most limited estimate of technological infrastructure and make necessary system upgrades

Actions taken should be appropriate in light of estimated access to electrical and communications infrastructure among the population.

Moreover, as key private-sector, civil-society and governmental internet platforms will experience great increases in demand during the emergency, it is essential that these

⁷² See sister report on *best practice and pedagogy for remote teaching*.

systems can function effectively under these increased pressures. Upgrades to bandwidth, servers, security features or other items might be necessary.

6. Strive for clarity, decisiveness and support in government action and coherence in donor and geographic coordination

This report has already highlighted that centralised systems appear able to move swiftly. However, it is also important that action is supported by clear communication, and that support of the right nature is provided to key system stakeholders (as in China).

Where donor, partner and/or regional government structures create additional complexity, coordination and coherence is key. Coordination of activities between institutions can be missing (as in Pakistan), and should such coordination be initiated as soon as possible. Lack of coordination among donor agencies can be exacerbated by decentralisation or by provincial or prefectural responsibility for education. This should be accounted for in effective planning.

7. Support cross-sectoral collaboration and alliances

Collaboration across government and with partners appears, in some cases, to have aided the effectiveness of the emergency response to the current crisis. Within government, such collaboration can involve the ministry of education and a ministry of telecommunication or technology. However, such collaborations can also be between government and the private sector or, in the case of LMICs, between donor agencies and the private sector, with government facilitation (as in Rwanda).

8. Consider education equity in relation to all forms of remote education

As many countries focus their efforts on online learning, equity issues resulting from digital divides will proliferate. No country currently has the internet connectivity, device penetration and the absence of poverty necessary to ensure that online learning is equitable. Print, broadcast and other means of disseminating information should, in many instances, supplement and even supplant efforts to shift education online.

9. Engage parents and families in home-based education, while recognising that many disadvantaged learners lack effective family support

Family engagement is crucial to home-based education. Parents and family members can influence the activities of their children, determine the use of devices (including radios), and establish norms and priorities. This is especially important in relation to girls' education in some countries, as social norms may limit their ability to engage with education in the home. Encouraging parents and family members to support home-based education—and the focus that it requires—is critical for success. It is also extremely important to consider the very real different family circumstances that children live in. Not every child has access to

effective family support and, without mitigation, there is a real risk that existing disadvantages will deepen during periods of school closure.

10. Adopt a learning-focused and adaptive mindset

Countries are reacting rapidly to a crisis and developing (and implementing) new policies at a speed that does not always allow for plans to be properly worked through. Such rapid implementation also does not allow for unintended consequences to be recognised before it is too late.

Adopting a learning-focused and adaptive mindset will aid governments in keeping track of whether their policy interventions are working well and will allow them opportunities to tweak or pivot where they are not. Such approaches are common in policy and programming in normal times, but they are even more important in a context of unforeseen crisis and rapidly shifting circumstances.

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