It's Not Too Late to Act on Early Learning: Understanding and recovering from the impact of pre-primary education closures during COVID-19

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This paper presents a new estimate that pre-primary school closures in 2020 may cost today's young children US\$ 1.6 trillion in lost earnings over their lifetimes. However, most low-and-middle income countries are leaving pre-primary education out of their responses to COVID-19.

This paper also draws lessons from accelerated, bridging, and remedial programmes on how introducing or expanding these transition programmes in the early years can mitigate the long-term impact on learning from pre-primary school closures.

Covid-19 & Children

KEY FINDINGS AND RECOMMENDATIONS

- Prioritize the reopening of pre-primary schools in all countries. Although they lost more instruction days in 2020, the youngest learners in low-and middle-income countries (LMICs) were less likely to access remote learning opportunities compared to primary and secondary school students. By mid-2021, over 60 countries had not fully reopened their pre-primary schools.
- Reopening schools alone is not enough, recovery measures are needed. Without any mitigation measures, pre-primary school closures in 2020 are estimated to cost the current cohort of pre-primary-aged children US\$ 1.6 trillion in lost future earnings. However, most LMICs are leaving out pre-primary education in their responses to COVID-19.
- Iransition programmes can support children left out of pre-primary education in 2020.

 A growing evidence base shows that accelerated, bridging and remedial programmes in the early years, often implemented by countries to transition to broader pre-primary education provision, can support school readiness. These programmes can be designed rapidly, delivered over a few weeks and at low cost to deliver positive outcomes, particularly for more disadvantaged children, or those with the lowest abilities at the outset.

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1. CONTEXT: THE IMPACT OF PRE-PRIMARY SCHOOL CLOSURES IS SIGNIFICANT

At the height of national closures in early April 2020, more than 180 million children had their pre-primary schooling disrupted due to COVID-19 (UNESCO, 2020). Among low-and middle-income countries (LMICs), pre-primary schools were unlikely to be prioritized during reopening (Nugroho et al., 2020). By the end of June 2021, 66 countries have not fully returned to in-person pre-primary instruction (Johns Hopkins University, World Bank and UNICEF, 2021). Preprimary school closures deprive children of cognitive stimulation and socio-emotional development, which fundamentally prepare them for their future course of learning. Children who lag behind in learning during the early years are found to stay behind for the remaining time they spend at school (UNICEF 2019a; Silberstein, 2021). Beyond the long-term impact on learning, the closure of early education facilities and limited interactions with extended families also deprive children of both social and cognitive stimulation beyond their homes (Yoshikawa et al., 2020).

2. THE COST OF INACTION IS HIGH, PARTICULARLY FOR MIDDLE-INCOME COUNTRIES

Pre-primary school closures in 2020 could cost today's young children an estimated US\$ 1.6 trillion in lost earnings over their lifetime. This cost estimate builds on the work of Lopez Boo, Behrman and Vasquez (2020) by adding data on actual durations of preprimary closures in 2020. It is based on data from 135 countries, covering approximately 75 per cent of the global pre-primary-aged children population. A description of the methodology is presented in Box 1. To contextualize the significance of the economic impact, it is equivalent to the last twelve years of total foreign aid provided by the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee countries (OECD, 2021). There are several reasons to suggest that this is a conservative estimate of the long-term economic impact of missing pre-primary school during COVID-19 closures. First, this estimate does not capture the impact on the 25 per cent of the population for which some data are missing. Secondly, the closure data for some countries only considered nation-wide closures; some children in these countries were experiencing local-level pre-primary school closures and the impact on them is also not captured. Finally, pre-primary education may also bring about positive outcomes that are difficult to monetize, for example, supporting mothers' mental health and crime reduction.

Middle-income countries are estimated to be hit hardest. On average, the impact of pre-primary school closures in 2020 is equivalent to over 2.5 per cent of middleincome countries' Gross Domestic Product (GDP), or close to two-thirds of average government expenditure on education among this group. In comparison, the impact on high- and low-income countries is estimated to be around 1 per cent of GDP. The severity of the impact in middle-income countries is driven by their progress before the pandemic to achieve higher levels of pre-primary enrolment, relative to low-income countries, combined with their experience of longer closures, relative to their highincome counterparts. Conversely, the less significant impact among low-income countries was due to the lower initial enrolment rates in pre-primary education (Lopez Boo et al., 2020), while high-income countries experienced shorter durations of school closures overall and were more likely to prioritize the reopening of pre-primary schools before higher school levels.

3. PRE-PRIMARY EDUCATION IS OFTEN LEFT OUT OF COUNTRY RESPONSES TO COVID-19

In the first half of 2021, the United Nations Educational, Scientific and Cultural Organization (UNESCO), UNICEF, the World Bank, and the OECD surveyed Ministries of Education around the world on their experiences with the COVID-19 pandemic and their national responses throughout 2020 (subsequently referred to here as the joint survey). The joint survey found that school closures have significantly impacted pre-primary education, with notable differences according to country income level. In 2020, highincome countries reported an average of 46 preprimary instruction days lost due to COVID-19, while low-, lower-middle and upper-middle income countries respectively lost 90, 122, and 106 days (UNESCO, UNICEF, World Bank and OECD, 2021). The remainder of this section, therefore, focuses on low-and middleincome countries.

The survey highlighted that, among LMICs, preprimary education was frequently left out of national responses to COVID-19, despite reporting more instruction days lost than other levels education.

Remote learning: Many governments swiftly adopted multiple modalities of remote learning to reach young learners left out of schools. While children in preprimary schools were at least as likely to face school closures as their older peers, the youngest learners were less likely to have options for learning remotely while their schools were closed. Only 60 per cent of countries had digital and broadcast learning available for pre-primary schools, while almost all countries



(more than 95 per cent) had these options available for primary and secondary levels (<u>UNICEF, 2020</u>). In the joint survey, fewer than one in five LMICs reported that over 75 per cent of pre-primary students took part in remote learning.

Few government guidelines covering remote-learning responses to COVID-19 closures refer to pre-primary education specifically. Where they do, they tend to indicate that governments are cautious about remote-learning provision for the youngest age groups, particularly online (Nugroho et al., 2020). Some of these concerns link back to health authority guidelines around limiting sedentary time for young children. Young children are also less likely to access remote learning options independently, requiring more intensive support from their caregivers, who may be facing increased demands on their time during COVID-19 closures.

Returning to in-person learning: Only one in four LMICs reported that over 75 per cent of pre-primary students attended school in-person after they reopened. In comparison, more than two-thirds of LMICs reported that over 75 per cent of primary and secondary students returned to in-person learning. This protracted return was observed despite growing evidence that younger children were less likely to contract or transmit the coronavirus (Melnick and Plasencia, 2021). Furthermore, LMICs were also much more likely to report that they were not monitoring pre-primary students' attendance.

Assessing learning losses: Less than a third of LMICs were planning to undertake an assessment of gaps in pre-primary student learning that may have accumulated during COVID-19 school closures. Again, this compares poorly against countries' plans to assess student learning at higher levels of schooling. This likely reflects the greater prevalence of student assessment programmes for primary and secondary education in LMICs, compared to those aimed at the pre-primary levels. It also points to a significant gap in knowledge to understand the impact of the COVID-19 pandemic on young children's learning. Closing this gap will be an important step in developing a strategy to mitigate their learning losses.

Remedial measures: Surveyed countries were asked about remediation measures, including remedial or accelerated programmes or increased in-person class time, which were implemented when schools reopened. While 70 per cent of LMICs were offering remediation measures for upper secondary students to mitigate learning losses incurred by school closures, only 44 per cent reported doing so for the pre-primary level.

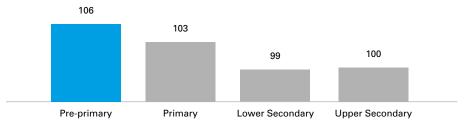
Education spending: Finally, pre-primary sub-sector spending is likely to increase in response to the pandemic. While 49 per cent of LMICs reported that total public education spending increased in 2020 and 55 per cent reported that it is planned to increase in 2021, this was less likely to be the case for pre-primary sub-sector (39 per cent and 49 per cent respectively). It is important to note here the low pre-pandemic levels for spending in the sub-sector, with 38 per cent of countries investing less than 2 per cent of their education budgets on pre-primary education (UNICEF, 2019b). In the joint survey, a third of LMICs (and most low-income countries) reported increases in education spending in response to COVID-19 were being funded by additional support from external donors. Meanwhile, less than 1 per cent of international education aid is spent on pre-primary education (ibid), with the amounts vulnerable to donor funding fluctuations (Hares et al., 2020).

UNICEF has called for 10 per cent of both domestic financing and international aid in education to be allocated to pre-primary education (UNICEF, 2019b). Protecting and continuing to increase pre-primary education budgets to reach this target is important to allow countries to respond and recover from COVID-19 learning losses. Every dollar (US\$) spent on pre-primary education is estimated to result in US\$ 9 of benefits to society (Muroga et al., 2020). Emerging evidence from the current crisis also suggests that pre-primary education may have a protective effect against learning loss (Kim et al., 2021).



Summary: Understanding the impact of and planned responses to pre-primary school closures

Among LMICs, pre-primary students lost an average of 106 in-person instruction days in 2020, more than other levels of schooling.



Note: Data from UNESCO, UNICEF, World Bank and OECD survey. N = 58 countries that provided a valid response to the specific survey question and defined as a lower middle-income country following World Bank's classification.

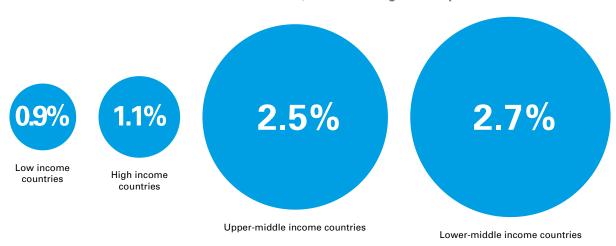
Pre-primary school closures in 2020 are estimated to cost

\$1.6 trillion

in lost future earnings globally.

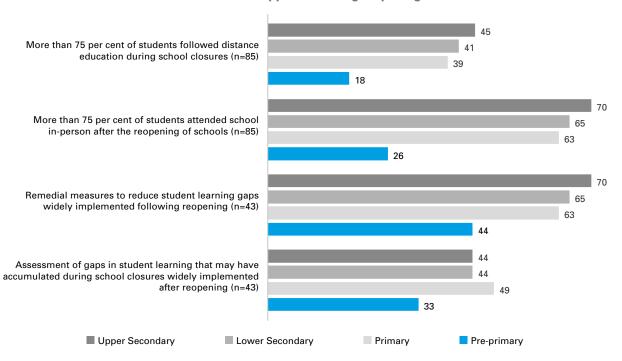
Note: Authors' analysis, based on methodology in Box 1.

Middle-income countries will be the hardest hit, with an average cost impact of over 2.5% of GDP



Note: Authors' analysis, based on methodology described in Box 1, represented as a proportion of countries' 2018 GDP.

Pre-primary students in LMICs are less likely to be able to learn remotely during school closures and receive support following reopening.





4. LESSONS FROM PROMISING TRANSITION PROGRAMMES TO RECOVER LOST LEARNING IN THE EARLY YEARS

Recent modelling published by the UNESCO Institute of Statistics (UIS) concluded that Grade 3 reading proficiency would only return to a pre-pandemic trajectory in 2030 (Gustafsson, 2021). With successful remediation this could occur earlier, but these scenarios assume that pre-primary institutions play a role in accelerating learning and cognitive development to help children to reach the level of age-specific child development seen before the pandemic (ibid, p.43). Accordingly, it is important to address learning losses faced by school children as well as preparing new learners, who may have experienced pre-primary disruptions, to enter primary school.

There are several examples of pre-pandemic programmes that have been used successfully to prepare children for starting primary school in the absence of a full pre-primary programme. These programmes demonstrate how children who missed out on some, or all, of the opportunity to attend pre-primary school due to COVID-19 can be supported before they fall even further behind.

This section presents key lessons from a rapid evidence review on three types of programmes in particular: (1) accelerated school readiness programmes that usually take place in the school holiday period prior to Grade 1 primary school; (2) bridging programmes that take place in the first months of Grade 1; and (3) remedial programmes that take place in the first two years of primary school. This paper refers to these types of interventions collectively as 'transition programmes', due to their common use by countries as part of the transition to universal pre-primary education provision.

A starting point for the review was with programmes featured in UNICEF's A World Ready to Learn (2019b) report; this was supplemented by a rapid literature search and outreach through UNICEF regional offices, completed between May–June 2021. As much as possible, this rapid review focused on transition programmes, which had been evaluated, to find a significant impact on children's schooling outcomes. A summary of the characteristics of the nine transition programmes that were identified and reviewed for this paper is provided in Table 1.



Table 1: Promising transition programmes for pre-primary education learning recovery

Programme name	Planning/ budgeting	Curriculum	Workforce	Family/community engagement	Quality assurance	Impact
Accelerated pre-prin	nary education progra	mmes				
Accelerated School Readiness (Mozambique)	US\$ 60/child (US\$ 39 if some components were delivered with other programmes); community-based	8 weeks (120 hours), during school holidays, based on national ECE curriculum	Volunteer facilitators, at least 18 years old, completed Grade 7, passed reading and writing tests	13 weeks of home- based parent-to- parent education	Families engaged to participate in monitoring; school capacity building.	0.52 SD on total IDELA score (experimental)
Accelerated School Readiness (Kiribati)	School-based	6 weeks, during school break	Early-grades primary or ECE teachers, trained on ASRP and paid an extra stipend	Parents invited to participate in Positive Parenting programme	Head teachers expected to supervise teachers, MoE ad-hoc monitoring	71% of participating children go into Grade 1, compared to 41% of non-participating children (non-experimental)
School Readiness Programme (Tanzania)	US\$ 12/child; community-based	16 weeks, during school holidays	Volunteer facilitators receive 10 days' training	Community members cook, provide case contributions and build classrooms	Oversight from ward education officers and the head teacher of the 'mother' primary school	63% of SRP children enrolled in Grade 1 and had higher IDELA scores than those with no ECE/public preschool
Accelerated pre-prin	nary education progra	mmes offered before o	or at start of Grade 1			
Accelerated School Readiness (Ethiopia)	US\$ 25–30/child	8 weeks (160 hours), during school holidays (also piloted in first months of Grade 1 but not as effective)	Grade 0 teacher, trained and paid US\$ 54 monthly stipend and additional US\$ 10 at end of summer	Local government and PTA worked with community stakeholders to enrol students	Monitoring by UNICEF offices	Students in ASR performed better on math, literacy, and science in Grade 1 than other students

Programme name	Planning/ budgeting	Curriculum	Workforce	Family/community engagement	Quality assurance	Impact				
Kindergarten Catch-up Education Program (Philippines)	School- or community-based	2- or 5-months curriculum, during/ after holidays, modified from full 40-week kindergarten curriculum	Kindergarten teachers must hold bachelor's degree with 18 ECE units	Community learning facilitators may take part in sessions	Teachers complete ECD to produce Kindergarten Progress Report for children's Grade 1 teachers	[No evaluation identified]				
Bridging programme										
School Readiness Programme (Cambodia)	School-based	2-months at the start of Grade 1, bridging curriculum	Primary teachers receive 14 days training on multi- sensory	N/A	Monitoring by government and local partners	0.27 SD impact at the end of the programme, persisting (0.23 SD) at the end of the school year (experimental)				
Remedial education	programme in the firs	t two years of primary	school							
Shishuvachan Program (India)	School- or community-based	1 hour/day, either in- or out-of- school, precisely- scheduled literacy activities	Primary teachers receive training, workshops, learning groups, certification and virtual counselling	Parent conferences, workshops to share and learn	Supervisors meet instructors twice a week, four zonal heads meet supervisors every 10 days	0.26-0.7 SD on reading (experimental)				
Soporte Pedagógico (Peru)	School-based	1 hour of tutoring, maximum 6 students per group, after official class time	Primary teachers receive 14 days training	School conferences with parents, parent workshops, school-community links	MINEDUC responsibility for monitoring	0.1 SD on reading comprehension, 0.9 SD on math (quasiexperimental, <1 year after programme)				
After-school remedial (the Gambia)	US\$ 241/child/year; community-based	12 hours/week over the school year	Educators with at least 12th Grade, 2-months preservice and follow-up annual and incluster training	Communities selected educators, identified suitable venue and time for children to learn	Field officers, programme supervisors and intervention team's staff monitored teachers.	0.75 SD higher on mathematics and language tests (experimental)				



Planning and budgeting: The costs of existing programmes are not always publicly documented. Where they were reported, implementation costs per child vary depending on programmes' components, duration and scale. Delivering some components through existing education programmes can increase cost-efficiency. Two points on resource allocation are particularly worth noting. First, as countries make the initial decision whether to invest in post-pandemic recovery in the early years of education, the existing evidence supports that recovery from learning deficits are cheaper when they are addressed earlier, before they become compounded with other deficits (Evans and Hares, 2021). Second, in making design decisions on what programme to offer, previous studies suggest that even short and low-cost programmes have been found to impact child development and school readiness.

The planning activities for the Mozambique programme were estimated to take up 7 per cent of the total programme costs or around US\$ 4 per participating child. These costs were primarily related to meetings and presentations to launch the programme and to build relationships with participating schools and communities. Governments can leverage their existing partnerships with community and private sector organizations to introduce or expand accelerated, bridging or remediation programmes targeting the early grades. With such partnerships, programmes can be designed rapidly. The Accelerated School Readiness programme in Ethiopia, for example, was developed over just three months in a partnership between different levels of the government, multiple development partners and a curriculum design firm (UNICEF, 2019c).

Curriculum: The content and duration of preprimary education recovery programming depend on its aim. An accelerated pre-primary programme curriculum is usually a condensed version of the local pre-primary curriculum. A bridging programme curriculum incorporates Grade 1 content to support the transition between pre-primary and primary. The Cambodia School Readiness Programme provides an example of this approach (Nonyama-Tarumi and Bredenberg, 2009). Remedial programming in early primary schools is usually targeted at basic skills, with a view to support children who do not yet possess these skills to engage with other curricular materials. A characteristic shared by several programmes reviewed was the use of a structured curriculum, with pre-set activities for each day and, in some instances, determined minute-by-minute, particularly those that relied on para-teachers or facilitators with no prior teaching experience.

Developing an accelerated curriculum encourages designers to prioritize and condense the full content to what are considered essential. With many existing national curricula being overambitious (Pritchett and Beatty, 2012), progressing at a much faster pace than students' learning, COVID-19 is an opportunity to address this by condensing them (Accelerated Education Working Group, 2020). This opportunity is being taken up by some countries, with 40 per cent of Ministries of Education reporting that they are prioritizing certain curriculum skills or areas in response to COVID-19 (UNESCO, UNICEF, World Bank and OECD, 2021). Having an existing accelerated curriculum could enable countries to do this more readily.

In Ethiopia, the Accelerated School Readiness programme is being implemented in areas affected by humanitarian crisis and as a catch-up programme following school closures due to COVID-19 (UNICEF Ethiopia, 2021). In Kiribati, there was potential for the accelerated curriculum to be used in case COVID-19 necessitated closures (Ministry of Education, 2020), though the country's limited exposure to the pandemic meant that this option was not used. These examples illustrate how having an accelerated curriculum can support the pre-primary education sub-sector's response to future crises. In both countries, the accelerated curricula are also used as a basis to develop full-year pre-primary programming.

With remedial programming, including at the early grades, there is a need to balance between reviewing missed content and learning new gradelevel topics, described by one education organization as "accelerate, not remediate" (TNTP, 2021).

The scenarios considered by UIS that allow students to catch-up in the early years, for example, were based on the assumption that there is acceleration or more learning than usual (Gustafsson, 2021).

The Shishuvachan programme in India, for instance, was found to be most effective as a complement, rather than a substitute, to the standard curricula, run within schools but outside of regular hours (He et al., 2009). This illustrates how combining remediation and grade-level content can achieve greater learning gains.

Finally, a well-designed pre-primary curriculum promotes holistic learning and development, including emergent language, literacy, numeracy and social-emotional development (UNICEF, 2019b). The reopening of pre-primary settings should adopt a coordinated and integrated approach to ensure children's holistic needs are met when they return, encompassing child protection, mental health and psychosocial support (UNICEF, the World Bank and



UNESCO, 2020). It can, for example, incorporate free play sessions to regain confidence with friends and the school environment as well as activities to guide children to recognize their feelings while staying at home (Capurso et al., 2020).

Workforce: Transition programmes can be led by preprimary or primary teachers who receive additional training and a stipend to deliver the accelerated, bridging or remedial curricula. They can also be led by locally recruited educators or facilitators without previous teaching experience who meet minimum qualification requirements and receive training on the curricula and materials used. The qualification requirement can at times be difficult to meet. Programmes have faced difficulty recruiting qualified female facilitators (Bonilla et al., 2019) or facilitators from the local community (Eble et al., 2019). In both instances, the educators had to pass proficiency tests and, as noted above, the curricula were designed to be highly structured and easily implemented in consideration of their lack of teaching experience.

In most instances, the educators or teachers receive financial compensation. The level of compensation will impact the profile of the workforce. Facilitators in the Mozambique programme are unpaid, which evaluators noted may impact the programme's sustainability as it becomes more embedded in routine education programming and/or the volunteers become more experienced. The evaluation report suggests creating a teaching apprenticeship where student teachers can receive academic credit for leading the summer programme (Bonilla et al., 2019). The Accelerated School Readiness programme in Ethiopia is similarly led by newly graduated or young teachers seeking to gain classroom experience as the monthly stipend payment, lower than a typical pre-primary teacher's salary, caused difficulty in attracting more qualified teachers (<u>UNICEF</u>, <u>2019c</u>).

Training durations vary and are generally shorter when they involve qualified teachers. In Mozambique, the 30 hours of pre-service training for volunteer facilitators took substantially longer than originally planned due to the low academic level of the participants (Bonilla et al., 2019). Finally, ongoing supervision or support is an important component of many of the programmes. In India's Shishuvachan programme, supervisors meet with teachers twice a week (He et al., 2009), facilitators in Tanzania's School Readiness programme receive oversight from the local education office and head teacher of an assigned primary school (EQUIP Tanzania, 2019), while primary teachers in Peru's Soporte Pedagógico programme receive various forms of support including pedagogical coaching and virtual

counselling (Chinen and Bonilla, 2017). In addition to the examples in Ethiopia and Peru, evidence from early grades primary programmes in South Africa also supports the impact of on-site coaching for teachers on student's learning outcomes (e.g. Taylor et al., 2019).

Family/community engagement: Many of the promising programmes include a family and/or community engagement component, frequently credited with supporting specific achievements. In most instances, these were intended to encourage parents to take responsibility for their children's attendance and to support learning at home. Some included dedicated parent workshops to influence home parenting practices. Parent-to-parent sessions as part of the Mozambique Accelerated School Readiness programme was found to influence parental awareness and attitude toward the importance of learning as well as positive parenting practices (Bonilla et al., 2019).

Community mobilization can also be used as a strategy for programme sustainability. Community contributions to the school readiness programme include cooking, providing cash contributions to the facilitators, programme planning and monitoring, and even building classrooms. An evaluation of Mozambique's accelerated school readiness programme proposed engaging community members in a number of ways. This included planning for programme sustainability, such as deciding on household financial contributions and linking with microcredit associations to implement an income generating project, based on the experience of another pre-primary programme in the country (Martinez et al., 2012, cited in Bonilla et al., 2019). In some instances, community engagement also allowed programmes to reach the most vulnerable children (UNICEF, 2019c).

While any increased engagement of caregivers in their children's learning should be leveraged as part of the return to school, over-reliance on family input to deliver programming impact has risks alongside their potential benefits. As schools reopen, it is important to acknowledge that the reliance on young children's parents and caregivers to support learning at home during extended COVID-19 closures can widen existing inequities. Children of less educated/wealthy parents, for example, are less likely to receive learning support at home (Brossard et al., 2020). Clarifying and aligning parents' expectations around learning and development outcomes is also important. This is illustrated by the experience in Ghana where adding a parental awareness component to a teacher training intervention led to negative impact on children's learning (Wolf, 2019).



Quality assurance: School-based transition programmes usually rely on supervision and monitoring by school leaders, while community-based programmes rely on monitoring by committees made up of community members, usually parents and local leaders. The diversity of pre-primary programme providers means that quality assurance processes play a very important role in ensuring that transition programmes achieve their intended outcomes. Linking with existing or formal quality assurance processes could be beneficial. In the Tanzania School Readiness programme, for example, each centre is linked to a 'mother' primary school that provides mentoring and technical oversight (EQUIP Tanzania, 2019). In the Philippines, the Kindergarten Catch-up Education programme requires teachers to administer the Early Childhood Care and Development (ECCD) Checklist¹ and classroom-based/teacher-made tools such as portfolio assessments, performancebased tasks, anchored in the national Kindergarten Curriculum Guide. The results of these inform the Kindergarten Progress Report that are turned over to the children's subsequent Grade 1 teachers or schools (Department of Education, 2016).

Independent evaluation reports were available for most of the programmes reviewed. Many were from pilot phases of the programmes, aiming to inform improvements before scale-up to additional communities. Consistent with evidence on preprimary education more broadly, the impact of transition programmes tend to be greatest for more disadvantaged children, or those with the lowest abilities at the outset. This further highlights the important role that such programmes could play to mitigate the impact of COVID-19 closures, which is also greatest on the most disadvantaged.

5. CONCLUSION: IT'S NOT TOO LATE TO ACT ON EARLY LEARNING

Young children's learning opportunities have been severely curtailed during the COVID-19 pandemic. Their experiences with extended school closures can have significant long-term effects. Pre-school aged children in middle-income countries bear the greatest risk of negative impacts.

With the high cost of inaction to address closures, and restrictions in the young children's ability to take part in remote learning, countries around the world must prioritize the reopening of pre-primary schools. Reopening schools alone is not enough. UNICEF, along with UNESCO and the World Bank, have called for countries to be supported to bring all children back to school, recover learning losses, and prepare and support teachers (Giannini, Jenkins and Saavedra, 2021). These supportive responses should include pre-primary education, though this is not currently the case in many LMICs.

It is not too late to act. Governments and partners can introduce accelerated, bridging or remedial programmes. These types of programmes have been used successfully to provide transitionary pre-primary education for children who would otherwise not be able to access it at all. The examples highlighted here show that these programmes can be designed rapidly through strategic partnerships and implemented at low-cost to produce positive impacts on children's school readiness. They can have multiple benefits: ameliorate the long-term impact of school closures on pre-primary-aged children directly affected by COVID-19; contribute to the expansion of the pre-primary education provision; and, strengthen the resilience of the education system in facing future crises.

¹ The ECCD Checklist is designed to be used by frontline service providers to determine if a child aged 0-5 is developing adequately or is at risk for developmental delays (ECCD Council, nd).



Summary: Lessons from promising practices in pre-primary transition programmes



Planning and budgeting

- Governments can coordinate/partner with community and the private sector to deliver.
- Even low-cost and short-term programmes can make a difference.
- The cost of addressing learning deficits is lower when done earlier.



Curriculum implementation

- An accelerated curriculum can drill down to what is essential and may be used to inform modifications to overambitious curricula.
- Remediation should complement rather than substitute grade-level curriculum.
- A holistic view of learning and development is important, including the acknowledgment of COVID-19.



Workforce development

- Programmes led by facilitators without teaching experience should consider longer training and use highly structured curriculum keyed to the transitional aspects of such programmes.
- Different approaches to compensation can impact recruitment and programme sustainability.
- Ongoing supervision, support or coaching is important regardless of an educator's background.



Family and community engagement

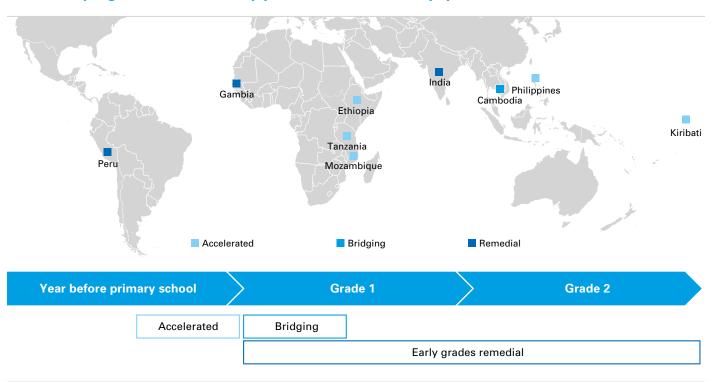
- Engaging families can increase their buy-in to support attendance and learning at home.
- Community mobilization can also support programme sustainability.
- Over-reliance on parental inputs in programme delivery can risk widening inequities.



Quality assurance

- Diversity of providers makes strong quality assurance processes crucial.
- Linking transition programmes to existing/formal systems, including schools, can be beneficial.
- Independent evaluations can lead to programme insights and improvements.

Transition programmes in the early years reviewed for this paper



Notes: Additional information on these programmes are presented in Table 1.

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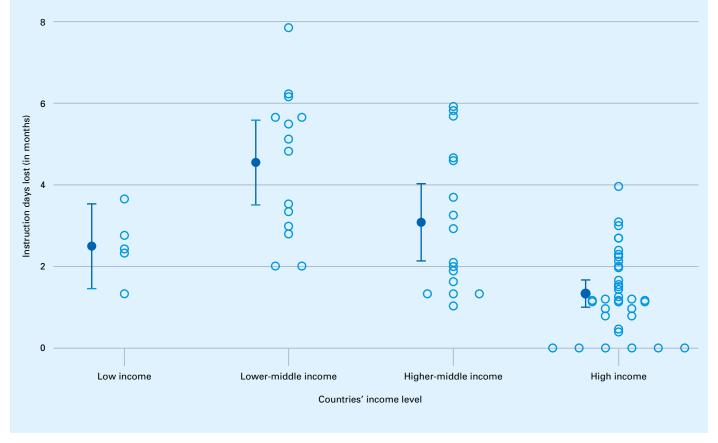
BOX 1: CALCULATING COST IMPACT OF PRE-PRIMARY SCHOOL CLOSURES IN 2020

Lopez-Boo, Behrman & Vazquez (2020) simulated the present discounted value of losses in future income (net of pre-primary program costs) if pre-primary programs are closed for 3, 6, or 12 months. These simulations considered a discount rate of 3 per cent, an impact on earnings of 8 per cent, a starting age for work of 18, a time horizon of 45 years, and a per-child cost that varies across income groups according to the price level ratio of purchasing-power-parity (PPP) conversion factors: \$1,300 for high-income countries, \$912 for upper-middle income countries, \$696 for lower-middle income countries, and \$654 for low-income countries.

We combined these estimates with the number of pre-primary instruction days lost in 2020 due to COVID-19. The number of lost instruction days (Figure 1) were obtained from:

- Reported typical (if there were subnational differences) or total number of instruction days excluding school holidays, public holidays and weekends between January-December 2020 where pre-primary schools were fully closed, from the UNESCO, UNICEF, World Bank & OECD (2021) joint survey of Ministries of Education.
- If the information is not available in the joint survey, we used the number of days when schools were closed due to COVID-19 from the UNESCO global monitoring of school closures. These take a single value for each day, covering pre-primary to upper secondary, not disaggregated by level, so we adjusted them using the ratio between the pre-primary closures and those of other education levels from the wave 3 survey. These estimates considered a discount rate of 3 per cent, an impact on earnings of 8 per cent, a starting age for work of 18, a time horizon of 45 years, and a per-child cost that varies across income groups according to the price level ratio of purchasing-power-parity (PPP) conversion factors: \$1,300 for high-income countries, \$912 for upper-middle income countries, \$696 for lower-middle income countries, and \$654 for low-income countries.

Figure 1: Pre-primary instruction days lost, distribution and confidence interval by country income level.





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