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Education response to COVID 19 pandemic, a special issue proposed by UNICEF: Editorial review

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ABSTRACT

This editorial paper presents 11 papers related to the special issue proposed by UNICEF on the Education Response to COVID-19. The COVID-19 pandemic provoked an education emergency of unprecedented scale. At its onset in February 2020, school closures were announced in the worst-hit countries. At the peak of the crisis, 90 per cent of learners worldwide had had their education disrupted. Some learners, especially those from the most marginalised population groups, were put at risk of permanent dropout, provoking long-term and significant negative effects on children's life-long wellbeing and the socio-economic development of their communities and countries. This special issue, which received contributions from UNICEF staff and various researchers, focuses on the impact of school closures, the effectiveness of remote learning solutions, equity implications, the mitigation of learning loss and notions around re-opening better. Different research perspectives and evidence is gathered to help strengthen policy considerations and future planning. The conclusion emphasizes building on the innovative solutions generated by the response to the crisis to make education systems more resilient, whilst also reinforcing the focus on equity and inclusion so that pre-existing disparities are not exacerbated in the future.

1. Introduction

School closure and the disruption of education happens, unfortunately, in any humanitarian crisis. Lack of education due to education disruption is likely to have significant long-term effects on children's life-long wellbeing as well as the social and economic development of their communities. Thus, education interventions are lifesaving in a broader sense: bringing education to children from the very early stages of the response to a crisis means much more than simply mitigating the effects of school closure (Global Education Cluster, 2018; Global Education Cluster 2020; Inter-agency Network for Education in Emergencies (INEE, 2020). In addition to re-establishing a sense of normalcy for children of all ages, schools offer a platform for other key services including health, nutrition, child protection, and water and sanitation, to support children beyond education outcomes. For the most vulnerable children, education provides much needed physical and psychosocial support and helps mitigate against exposure to gender-based violence, early marriage, early pregnancy, child labor and forced recruitment (European Commission, 2019). Trying to provide such services through remote channels or directly to children's homes is problematic.

However, school reopening or provision of in-person education through alternative modalities in humanitarian settings can be difficult for a variety of reasons, not the least of which is convincing government, parents and teachers that the risk of not returning to school may often outweigh that of being in school. Other factors include insecurity (such as during the Sahel crisis, where schools and, more broadly, education was targeted by armed groups) or fear of accelerated transmission during epidemics, such as during the 2014 Ebola Virus Disease outbreak

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in Guinea, Liberia and Sierra Leone, when five million pupils were forced out of school: it was believed at that time that the gathering of children in school could have exacerbated transmission. School closure was considered as a strategy to contain transmission, as it does in the case of influenza (Minardi et al., 2020). This has also proved to be the case with COVID-19, which the scientific community is striving to understand as the health emergency unfolds and new variants and waves of infection emerge. The belief of the risk of infection may unfortunately give rise to keeping schools closed for long periods while education is supported though alternative distance modalities and various mixes of no-, low- and high-tech solutions.

When the COVID-19 pandemic was declared, it disrupted the lives of children and provoked an education emergency of unprecedented scale. The onset of the pandemic in February 2020 led to school closures being announced in the worst-hit countries. As the true scale of the health emergency became clear, more and more countries began closing schools. By April 2020, governments in more than 190 countries had temporarily closed schools in response to the health emergency. These closures forced over 90 per cent of enrolled learners around the world (1.6 billion) into distance learning or left them out of school (UNESCO, 2020a). With each passing day that children around the world stayed out of school, they were experiencing learning loss; some still are after more than one year since the onset of the pandemic.

Prior to the pandemic, the world was already grappling with a learning crisis and skill gaps - millions of children and young people were not on track to develop the skills they need to get a job or start a business and thus contribute to their communities. The inequities (often associated with poverty, gender, disability, ethnolinguistic status, and other socioeconomic conditions) that have long kept millions of children from accessing quality education were further exposed by the pandemic as millions more missed out on services often provided through schools such as nutrition, immunization, mental health and psychosocial support and protection. While before the pandemic 53 per cent of 10-year-old children were either out of school or in school but not able to read, this key indicator of the learning crisis could increase by as much as 10 percentage points as a result of COVID-19 (Education Commission, 2021). The trends observed pre-COVID-19 indicated that just under half (43 per cent) of primary children would still be learning poor in 2030 (World Bank, 2019). Without swift remedial action, learning poverty reduction targets could be delayed by more than two decades. Should this projection come to pass, the consequences for children and society will be devastating and have long-term negative effects on life outcomes, including health, nutrition, and socio-economic development. For the most marginalized children, there is the increased risk of being left even further behind (Education Commission, 2021), moreover exacerbated in conflict-affected countries, where half of out-of-school children live. The World Bank estimates that the loss of learning will cost this cohort of students nearly US $10 trillion in earnings, 10 per cent of the global GDP (Azevedo et al., 2020).

National governments, school administrators and educators have been struggling to deliver curriculum content using alternative methods; meet the emerging educational, economic and psychosocial needs of students, households and teachers; plan how schools might re-open during the pandemic; develop newer, more innovative and inclusive approaches to deliver education; and think about how school systems could be more resilient in the future. At the same time, the pandemic also brought innovation in remote learning modalities: 90 per cent of countries implemented remote learning solutions during COVID-19-related school closures (UNESCO et al., 2020b). Millions of children and young people have continued their education online, but they are the exception. The pandemic shone a light on deep divides in equal access to quality learning and skills and digital connectivity. School closures have the greatest impact on the most vulnerable children who are far less likely to have access to remote learning and more likely to be exposed to violence, neglect, child marriage and other risks. In July 2020, it was estimated that 24 million children and adolescents, from preschool to tertiary education, could never return to school even after schools reopen (UNESCO, 2020b).

The cost of inaction is high, and we cannot afford to let children and young people become the 'COVID generation' and bear the brunt of this pandemic. Education is key to recovery – including economic recovery. Children and young people need to be able to resume in-person schooling as soon as possible, and when they walk through those school doors they must be offered a full range of remedial and support services, including complimentary world class digital learning, with teachers given resources to empower them to support children's needs holistically and bring them back on track.

During this crisis, UNICEF is providing support to children around the world through humanitarian action, provision of material resources, support to ministries to effectively plan for re-opening, compiling information, data and evidence on critical gaps, and addressing the needs of girls and the most marginalized groups, as well as through promising practices that will support the far-reaching global response to the crisis. UNICEF has continued to partner with development partners and governments in each of these areas at global, regional and country levels. UNICEF's response to the crisis has included leveraging our unique position in 153 countries in the world to gather evidence and share knowledge and technical expertise. Hence this special issue provided a unique opportunity to examine the effects of the COVID-19 pandemic and education response, from the perspective of different stakeholders, to inform further research and policy responses.

This special issue, which received contributions from UNICEF staff and various researchers, focuses on the impact of school closures, the effectiveness of remote learning solutions, and an analysis of the response from an equity perspective. The papers explore efforts to mitigate learning loss and open better schools in the future. The research should help strengthen the evidence base for better informed future policy and planning responses.

2. 11 papers are included in this special issue

Three papers deal with the impact of school closure on outcomes for children. In that regard, Yao et al. revisited the consequences of the largest Ebola outbreak in 2013−16, using household survey datasets from the three affected countries in West Africa (Guinea, Liberia, and Sierra Leone). They apply a district-level analysis to explore the longer-term impact of the epidemic on school attendance and conclude that school attendance only recovered after three to four years following the epidemic, with no significant worsening for children from vulnerable backgrounds. Their findings, however, call for further research on migration patterns, the investment of emergency relief and overseas development aid across regions, and risk factors associated with orphan status and early marriage for girls in regard to learning losses for children who were out of school for up to an entire school year.

Also building on past evidence, Chavez et al. examined a significant number of studies and research papers, focusing on the impacts of school closures on child protection outcomes and how governments responded to them. They found that evidence in that regard is variable, being more diverse in terms of adolescent pregnancy (with results showing an increase of pregnancies) than on harmful practices, despite the impact of school closure in terms of increased violence, in particular sexual violence, and exploitation. This may invite further research in those areas, but also calls for concrete policy action to mitigate risk, and to open better to ensure a safe return to school. In that regard, policy responses for children in vulnerable circumstances, particularly girls and young women, and children with disabilities, will be key, including investments in social protection.

Alban Conto et al. analyzed the extent to which school closures affect children's acquisition of foundational skills and how countries were delivering learning during the pandemic in 2020. Using household survey data from ten low- and lower-middle-income countries, they found that missing in-person learning at school is associated with lower

reading and numeracy outcomes. This complements previous analysis from the development and academic sectors, such as Azevedo et al. (2020) or Kaffenberger (2021); the latter providing a theoretical framework and modelling of prospective learnings losses. In addition, the paper is the first one presented in this special issue that uses the results of national surveys collected during the pandemic in 2020 (UNESCO et al., 2020a), and documents the multiple remote learning solutions and measures undertaken worldwide to mitigate learning losses. It also identifies gaps that question the effectiveness and equity dimensions of those initiatives, especially in lower-income countries.

Avanesian et al. adopts an equity perspective using household survey data and analyzes the extent to which remote learning policies adopted by ministries of education worldwide have the potential to reach children and adolescents during school closures, considering the availability of radio, TV, computer and internet access. Through the analysis of a proposed reachability indicator, the results are concerning: although 90 per cent of countries implemented remote learning solutions (UNESCO et al., 2020b), 1 in 3 school children missed out because they lacked the relevant device. The potential implications of using this indicator and type of analysis is enormous: first, the poorest and more remote children are at greater risk of not being reached; the implication being that the response to school closure must take special measures to include them. Second, such analyses could be embedded systematically in risk informed programming in the recurrent education sector analysis and planning, following UNESCO IIEP et al. (2021), to anticipate future shocks and school closures more effectively. Finally, the approach can be adopted to provide a baseline for decisionmakers who are proactively engaging in remote learning modalities or blended learning. This is echoed by Mobarack who examines the results of phone surveys in four countries (Ethiopia, India, Peru, and Vietnam) to analyze socio-economic disparities within remote learning. This paper emphasizes the inequities of remote learning experience due to the lack of infrastructural capacity and a highly skewed distribution of resources, also concluding that access to remote learning resources for marginalized students is key to reducing inequality in learning loss in the global South. In addition, Jones et al. explore the social determinants of adolescents' access to education during the pandemic in three different urban settings in Bangladesh, Ethiopia and Jordan. Using mixed method data coming from a phone survey and qualitative interviews with adolescent boys and girls, they highlight that the pandemic is compounding pre-existing vulnerabilities to educational disadvantage, and that gender, poverty and disability are intersecting to deepen social inequalities. The paper also concludes by reflecting on policy implications for inclusive distance education in emergencies.

These three papers focus on access to basic facilities and subsequent disparities in benefiting from remote learning opportunities. However, access alone does not guarantee effective use or effective learning. We therefore must look beyond access to ensure more inclusive and effective remote learning solutions. How then can remote learning solutions be improved to enhance the effectiveness of remote learning experiences? This has been documented in many ways (UNICEF, 2021). Van Cappelle et al., using the case of India, consider how the impact of responses to school closure can be measured in order to make them more effective in the event of further disruptions, and how education communities can be supported in developing more creative, flexible and effective approaches to learning. Their paper builds on the findings from a UNICEF survey targeting parents and adolescents across six states in India, and identifies lessons learned to help address learning inequities during future school closures. Beyond access, they find significant variations in adolescents' use of technology for learning purposes and their perceptions of learning, linked to the frequency of teacher contact, the type of remote learning modality, gender, location and type of school. This paper provides a useful analysis for government strategies and policies to ensure better utilization of the technologies that are available in households, with an eye to ensuring equity.

Ambika et al. focused on remote digital learning, where both the teaching and learning happens through electronic devices, which is relatively disruptive for the entire teaching-learning community. These authors wanted to understand how teachers and students had fared with online classes in India; they investigated users' experiences, as well as the challenges faced by teachers and learners. To this end, they developed four separate questionnaires for students, teachers, college students, and college professors, inquiring about various aspects of online classes including setting up online education at home, knowledge transfer, comfort, evaluation and future aspects. This paper reflects the merits and demerits of the 'new normal' of online education from home; it highlights both the successes and the challenges of online education compared to regular in-person classes, therefore providing insights on potential improvements for greater efficiency. This study provides valuable insights to inform policy guidance and a framework to modify or create educational policies, laws and schemes aimed at providing equal access to remote learning resources for all learners.

The present recovery phase seeks to bring children safely back to school and enable them to learn in a supportive environment. There is growing evidence that in-person schooling does not appear to be a main driver of COVID-19 infection spikes. Children in school do not appear to be exposed to higher risks of infection when mitigation measures are in place compared to when not in school, and school staff also do not appear to be at a higher relative risk compared to the general population (UNICEF, 2020). It is important to note that, in most cases, schools have reopened along with the implementation of various mitigation measures, and some of the early research reviewed was collected in the context of relatively limited school re-openings. It is also important to note that in the context of a pandemic, policy makers in the education sector always face a complex dilemma regarding the reopening of schools, particularly when facing a public health crisis. In that regard, Hawk et al. analyze ethical considerations in reopening decisions. The authors propose the use of an ethical strategy—the "Eight Key Questions"—to clarify the issues involved in decision-making. While every context is unique, the adoption of this investigative process and ethical litmus test may help clarify the trade-offs in health, education, protection, social services, economic productivity and the best interests of the child.

Beyond opening school and bringing back all children, remedial measures to mitigate lost learning is key. Nugroho et al. (2020) documented how countries prepared to tackle this thorny problem, using direct responses from ministries of education gathered through the second joint survey implemented by UNESCO et al. (2020a); UNESCO et al. (2021) provided evidence using the results of the third round of this survey of education ministries to gauge how countries were preparing for recovery. In this issue, Chakera et al. propose to model learning losses due to the pandemic, as well as to identify the potential for cost effective strategies to build back better. Data from Early Grade Reading Assessments (EGRA) in Ethiopia, Kenya, Liberia, Tanzania, and Uganda suggest that school closures and limited efforts to provide remote learning opportunities could lead to from one-half to over a year's worth of learning loss. In modeling loss over time, they found that the learning deficits for a child in grade 3 could lead to 2.8 years of lost learning by grade 10. While COVID-19 has stymied learning, the findings highlight the need for bold, learning-focused reform, consistent with the literature reviewed in their paper, particularly related to reform on targeted instruction and structured pedagogy, which could improve learning even beyond pre-COVID-19 levels.

3. What's next then?

Building on the papers presented and other evidence, with a special focus on experiences from the field, the paper from Lennox et al. concludes this volume. It emphasizes building on the innovation that grew flexible learning platforms and pathways, which education sector plans must build upon in order to make education systems more resilient (Prachis et al., 2020), including system capacity to switch from

face-to-face learning to blended/remote learning solutions as and when required. This is particularly relevant as we see a succession of waves of COVID-19 in many countries. The paper also notes the acceleration of alternative learning pathways as an equity-focused response to mitigate the very real risk of exacerbating pre-existing disparities. These tools must be paired with investments in the people expected to use them and strengthened data systems with learning at the center. To ensure plans are rooted in increasingly pressurized budgets, Education Ministers will increasingly need to justify such investments. An expansion of partnerships will be necessary to secure greater and more innovative forms of finance, but also to support affordable digital learning solutions. If these opportunities are seized despite the disruption wrought by the pandemic, they can equalize opportunities and accelerate progress in children's educational rights in the longer term.

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