

EdTech<sup>Hub</sup>

# EDTECH AND COVID-19

## 10 THINGS TO KNOW



## Covid-19 has reshaped our world.

In education, mass school closures have accelerated the global use of education technologies – EdTech.

Yet the benefits do not reach everyone.

Since the start of the pandemic, **EdTech Hub** and its partners have been researching and applying evidence on what works in technology for education in different contexts.

Here are 10 important lessons from that work.



# 01 Use EdTech in ways that reach the most marginalised

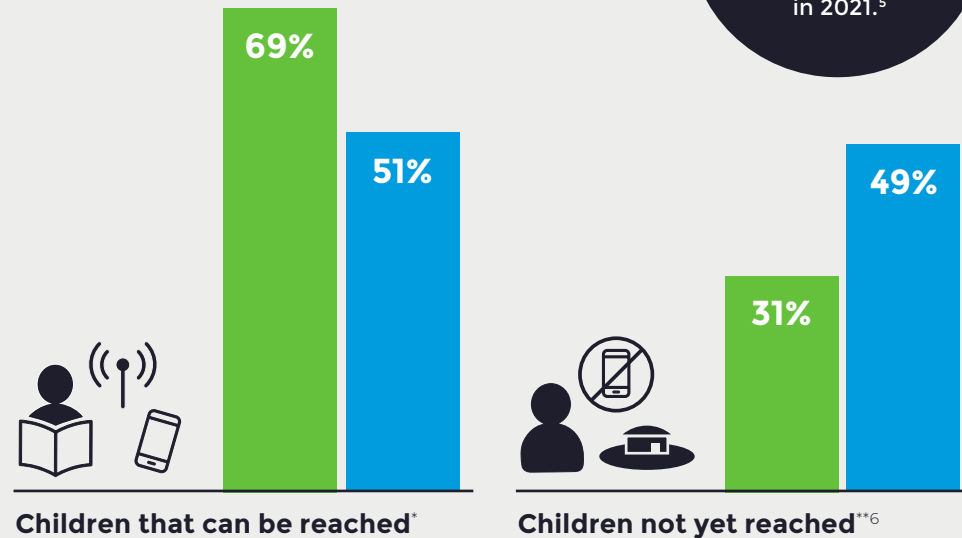
The response to Covid-19 has widened inequalities within and between countries and exacerbated an existing learning crisis.<sup>1</sup> Technology can widen or narrow these gaps.<sup>2</sup>

If carefully used, EdTech can help reach learners marginalised by poverty, gender, language, disability, displacement, and being out of school.<sup>3</sup>

During the pandemic, **EdTech Hub's Rapid Evidence Reviews** have synthesised evidence on how radio, television, and other technologies can work for girls, refugees, and children with special education needs and disabilities.<sup>4</sup>

## Digital and broadcast remote learning

■ World ■ Sub-Saharan Africa



\* The maximum % of children estimated to be reachable by policies and technologies in place by July 2020.

\*\* The minimum % of children estimated to be not yet reachable due to lack of policies and technologies in place by July 2020 (likely to be higher).



In response to Covid-19 school closures, Papua New Guinea, Chile, and South Korea examined the needs of their education systems and deployed context-specific 'multimodal' distance learning solutions that used available technology to reach marginalised children.<sup>7</sup>



## 02 One size won't fit all; use a 'multimodal' approach

Take an education-first approach, considering learner, carer, and teacher needs and how technology can support these.

In the short term, a 'multimodal' approach — a combination of high-, low-, and no-tech — increases opportunities for marginalised children to continue learning in emergencies.<sup>8</sup> Longer term, EdTech combined with evidence-based approaches known to work well in education<sup>9</sup> can help close learning gaps.<sup>10</sup>

### 03 Think about personal connection, well-being, and safety

During the pandemic, children face higher risks of abuse as poverty increases, schools are closed, and learning moves online.

Children and carers can use EdTech to connect with teachers over SMS or messaging apps<sup>11</sup> to support social and emotional learning and safeguarding.<sup>12</sup> For the most marginalised, this can be blended with no-tech options such as safe spaces for girls.<sup>13</sup>



**500,000**  
girls are now at  
greater risk of  
child marriage.<sup>15</sup>



In Zambia, Zimbabwe, and Tanzania, CAMFED and the Girls Education Challenge are supporting young female leaders to spread well-being and health messages during the pandemic, via low-tech such as radio.<sup>14</sup>



In Ghana, when Covid-19 struck, the government established a Virtual Learning Taskforce that ensured that 90% of pre-service teachers could continue their training remotely.<sup>21</sup>



## 04 Enhance teacher professional development

Teachers play a pivotal role in education, and technology should be used to support, not replace, them.<sup>16</sup> Yet, in many places, limited training has been provided for teachers expected to teach remotely.<sup>17</sup>

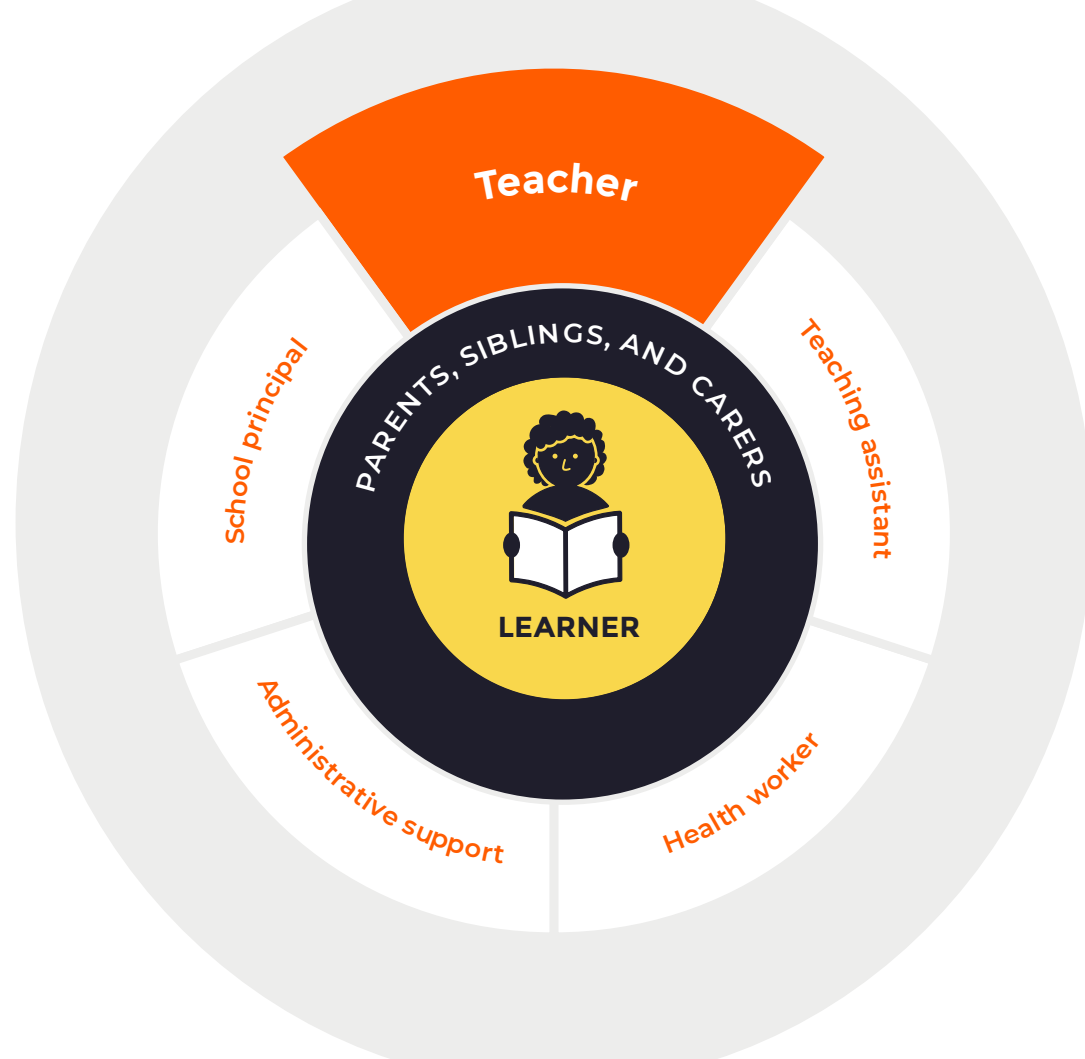
Teachers and the broader education workforce need support in areas such as distance pedagogy, self-confidence, and digital skills.<sup>18</sup> Technology can help teachers learn by enabling teacher professional development and facilitating access to open educational resources such as lesson plans.<sup>19,20</sup>

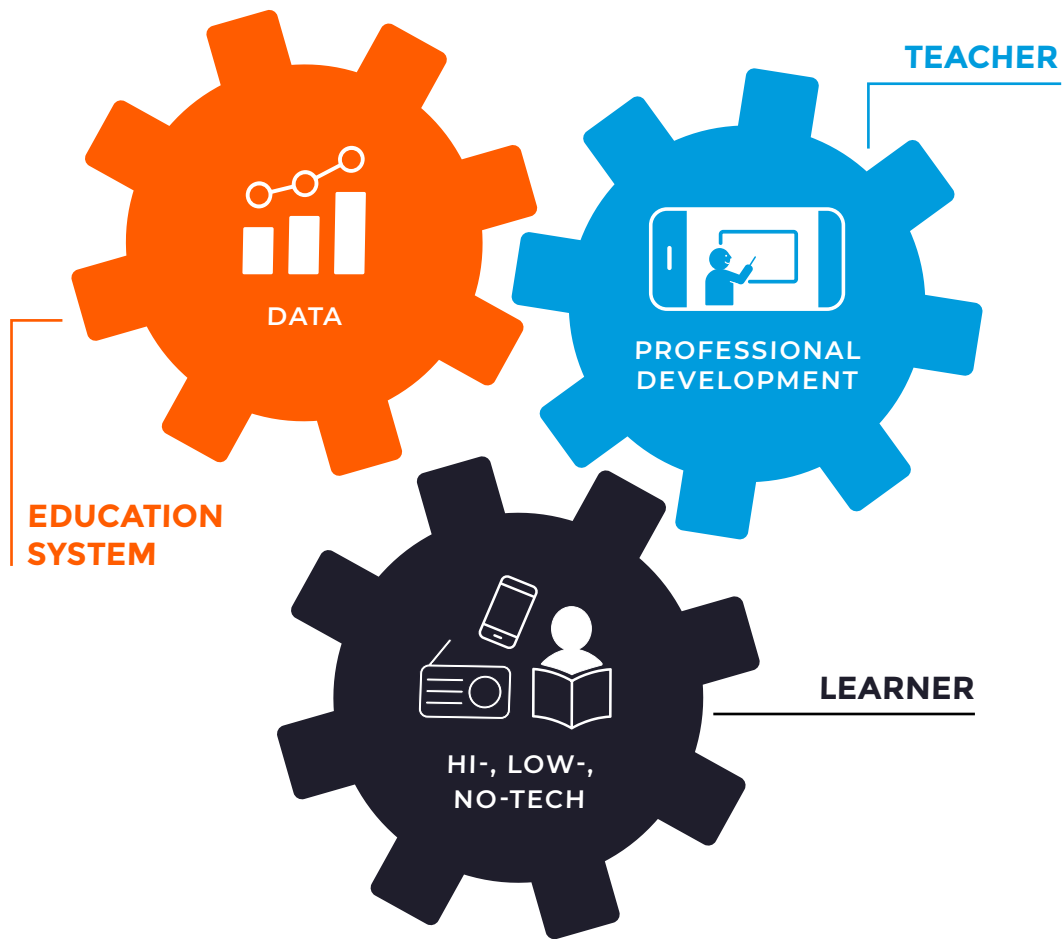
## 05 Build learning teams: Involve parents, siblings, and carers

Forming a 'learning team' with learners at the centre means that carers can engage in children's learning and teachers are not working alone.<sup>22</sup>

Families can provide the human support or "teaching presence"<sup>23</sup> learners need to study remotely. Parents are vital to distance learning as children are unlikely to use self-study materials meaningfully without support.<sup>24</sup> Parents also often decide whether children, particularly girls, can access technology.<sup>25</sup>

In Uganda, EdTech Hub is supporting Mango Tree to implement **Interactive Radio Instruction**<sup>26</sup> in response to the pandemic, experimenting with using 'co-teachers' (usually parents or older siblings) alongside supplementary materials to develop early literacy.





## 06 Apply EdTech across system, teacher, and learner needs

EdTech has a history of failed 'silver bullet' interventions focussed on hardware provision.<sup>27</sup> A more holistic and context-specific approach is more likely to be effective: using technologies at the system-, teacher-, and learner-levels and ensuring they are aligned with each other is critical. Decision-makers should consider the area in their system where investment has the greatest potential to help reach their goals.<sup>28</sup>

As part of the [#SaveOurFuture White Paper](#), EdTech Hub and others emphasised the need for equitable and appropriate use of EdTech, including improving data collection across education systems, supporting teacher professional development, and using hi-, low-, and no-tech options to reach marginalised learners.<sup>29</sup>



## 07 Adapt existing content, pedagogies, and hardware

New approaches to EdTech are not always needed, particularly in the midst of a crisis and when resources are constrained.

It is often more effective and cheaper to build on what is already there by aligning with existing curricula, retaining underlying pedagogies, and using available hardware.<sup>30</sup>

In Zanzibar, EdTech Hub has been supporting decision-makers to plan and adapt during Covid-19, advising officials on how best to **'curate rather than create'** digital content.<sup>31</sup>



Open educational resources can be adapted for out-of-school children to learn in their own languages, as shown by the Let's Read at Home project.<sup>32</sup>



## 08 Reimagine education by testing new approaches

The Covid-19 pandemic has driven experimentation in education through necessity.<sup>33</sup>

If carefully deployed, using core digital principles and involving users in design to support iteration, EdTech innovation can help close gaps that the pandemic has exacerbated and boost progress towards achieving SDG4.

EdTech Hub works with partners to test and improve interventions using **'sandboxes'** — small scale trials in real-world environments — for example, working with Deaf Reach to test online and offline EdTech for deaf learners in Pakistan.<sup>34</sup>

## 09 Consider political will, planning, and partnerships

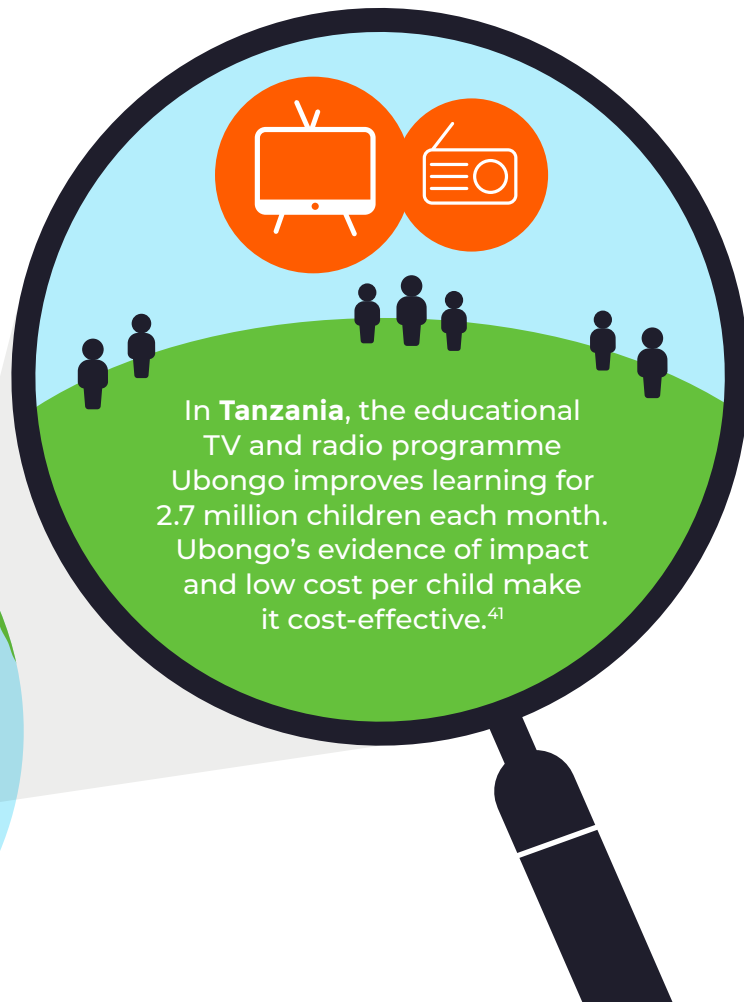
Effective, affordable, and sustainable use of EdTech requires planning and a supportive 'enabling environment', backed by political vision, leadership, and commitment across government and other actors.<sup>35</sup>

Stakeholder partnerships, including with the private sector or civil society, can improve EdTech effectiveness by pooling knowledge and sharing costs.<sup>36</sup>

The **'Education for the most marginalised post-Covid-19'** report, produced by the UNESCO Chair in ICT for Development, with support from EdTech Hub, was developed through consultation with government officials and advisors and provides guidance for governments on how to use EdTech to reach marginalised learners post-Covid-19.<sup>37</sup>



Rising Academies have produced 'Rising On Air' – radio and SMS resources aiming to reach over 10 million children during the pandemic – in partnership with the governments of Sierra Leone, Liberia, and others across 16 countries.<sup>38</sup>



## 10 Scale and invest where EdTech is most effective, equitable, and appropriate

EdTech interventions often have significant potential for growth. However, following Covid-19, education budgets in low- and lower-middle income countries could face a funding gap of nearly \$200 billion per year<sup>39</sup> and EdTech will need to provide value for money.

Investing in financially sustainable EdTech that can improve education at scale is an important way to strengthen cost-effectiveness.<sup>40</sup>

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This publication draws upon work conducted across the EdTech Hub.

The writing team was Susan Nicolai, Sam Wilson and Kate Jefferies, with Jamie Proctor, Tahi Gichigi, and Briony Gould.

With thanks to all those at the EdTech Hub and its Strategic Advisers for their helpful comments and revisions.

Design by Lucy Peers

December, 2020

EdTech Hub is supported by



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DOI: 10.5281/zenodo.4351354

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