Fernando M. Reimers

Harvard Graduate School of Education Harvard University Cambridge, MA, USA

Renato Opertti UNESCO International Bureau of Education Geneva, Switzerland

LEARNING TO BUILD BACK BETTER FUTURES FOR EDUCATION

Lessons from educational innovation during the covid-19 pandemic



Global Education Innovation Initiative

EDITORS

Fernando M. Reimers

Harvard Graduate School of Education Harvard University Cambridge, MA, USA

Renato Opertti UNESCO International Bureau of Education Geneva, Switzerland

Published in Geneva, November 2021 by:



Unesco International Bureau of Education UNESCO - IBE C.P. 199 1211 Geneva 20 Switzerland Tel.: +41.22.917.78.00 Fax: +41.22.917.78.01 Email: ibe.training@unesco.org

WWW.IBE.UNESCO.ORG

Global Education Innovation Initiative

© The Editor(s) and The Author(s) 2022. This book is an open access publication. Open Access This book is licensed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made. The images or other third party material in this book are included in the book's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the book's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specifc statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use. The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affliations. This book by UNESCO International Bureau of Education Geneva, Switzerland [address]

Fernando M. Reimers

Harvard Graduate School of Education Harvard University Cambridge, MA, USA

Renato Opertti

UNESCO International Bureau of Education Geneva, Switzerland

LEARNING TO BUILD BACK BETTER FUTURES FOR EDUCATION

Lessons from educational innovation during the covid-19 pandemic





Global Education Innovation Initiative

43

FOREWORD	р4
by Ms Stefania Giannini, Assistant Director-General for Education, UNESCO	р. 4
by Mr Yao Ydo, Director of the UNESCO International Bureau of Education	р. 5
ACKNOWLEDGMENTS	р6
CHAPTER 1. Educational innovation during a global crisis	р. 8

INNOVATIONS SUPPORTING STUDENT-CENTRED LEARNING

CHAPTER 2.	ELAN: Enhancing literacy and numeracy through smartphones, Bangladesh and Pakistan p.44
CHAPTER 3.	Digital Knowledge Bank, Egypt p.50
CHAPTER 4.	Home-based learning programmes, <i>India</i> p.59
CHAPTER 5.	A digital application for young learners, <i>Indonesia</i>
CHAPTER 6.	Rising on Air radio education, <i>Liberia and Sierra Leone</i> p.8C
CHAPTER 7.	nstructional guides for learning at home, Guanajuato, Mexico p.87
CHAPTER 8.	Schools as community learning centres, Mexico
CHAPTER 9.	Independent Learning Measurement initiative, Mexico
CHAPTER 10.	National programme for recovering learning loss, Mexico p.108
CHAPTER 11	Assessing students' competences through digital technologies, Norway p.118
CHAPTER 12	• Madrasati e-learning platform, Saudi Arabia p.125
CHAPTER 13.	Pangea Publishing: Making real-time, culturally relevant content, Uganda p.136
CHAPTER 14	• Tutoring as a targeted intervention to accelerate learning, United Kingdom of Great Britain and Northern Ireland p.143
CHAPTER 15	• Ceibal Integrado: Innovation in the public education system, Uruguay p.154

INNOVATIONS SUPPORTING DEEPER LEARNING

CHAPTER 16. Supporting student collaboration and engagement through online	
project- based learning, <i>Finland</i>	p.164
CHAPTER 17. Play-based science learning, <i>Finland</i>	p.173
CHAPTER 18. Internet-free learning in low-resource contexts, Qatar	p.185

163

INNOVATIONS SUPPORTING

193

211

29`

STUDENT SOCIO-EMOTIONAL DEVELOPMENT AND WELL-BEING

CHAPTER 19	Using audio to deliver social and emotional education to refugee	
	and migrant children, Colombia	p.194
CHAPTER 20	• A schoolwide strategy for social and emotional learning in the comm	unity,
	Colombia	p.200

INNOVATIONS SUPPORTING

TEACHER AND SCHOOL PRINCIPAL PROFESSIONAL DEVELOPMENT

CHAPTER 21. D Si	Developing a platform for learning activities and formative assessment, i ão Paulo, Brazil
CHAPTER 22. D d	Digital competence as an enabler for teachers' professional levelopment, Brazil p.222
CHAPTER 23. P P	Professional development of the higher education workforce, People's Republic of China
CHAPTER 24. A	Accelerating the development of teachers' professional digital competences, Costa Rica
CHAPTER 25. S	School Transformation Journey: Enabling blended learning in public chools, Egypt
CHAPTER 26. Le	everaging human connection in virtual teacher professional Jevelopment programmes, Guatemala p.257
CHAPTER 27. Re	ehnuma programme: School leaders as entrepreneurs, <i>India</i>
CHAPTER 28. N	Aultipronged approach to promote educational continuity, Kenya p.273
CHAPTER 29. Te	eacher professional development in rural areas, Peru

INNOVATIONS SUPPORTING FAMILY ENGAGEMENT

CHAPTER 30. Rocket Learning: Leveraging technology to improve family engageme	nt
for early learning, India	p.292
CHAPTER 31. Schools as learning hubs for family support, South Africa	p.301
CHAPTER 32. Family, community and school engagement, United States of America	p.310



INNOVATIONS SUPPORTING FAMILY ENGAGEMENT



Chapter 31. SOUTH AFRICA

Schools as learning hubs for family support

Shirley Eadie

ABSTRACT

Together In My Education (TIME) is an intervention conceived of and delivered during the COVID-19 pandemic in South Africa. The TIME project supports the development of skills, knowledge, confidence and belief systems (Mapp & Kuttner, 2013) of both schools and families, so that they are empowered to work in partnership and share responsibility for young children's learning to achieve improved learning outcomes. It demonstrates the potential for system take-up and policies that prioritize community involvement and use schools as learning hubs. This case study shows that, in contexts characterized by digital exclusion and poorly resourced schools, highly structured at-home approaches that foster caregiver involvement in early-grade learning are achievable via targeted professional development, building networks of collaboration and scaffolded family engagement.

KEYWORDS

At-home learning, early childhood education, guides for learning at home, school-community relations, parenting education/parenting support, teacher mindsets.



BIG IDEAS ...

What is the future of remote and digital learning for early-grade learners, in education systems battling significant digital exclusion and poorly resourced school and home environments? Here we explore the potential of highly structured home-school learning programmes - that equip caregivers, educators and learners with the tools for learning at school and at home – and how home-school partnerships can centralize student learning and enable schools as learning hubs.

INTRODUCTION

Prior to the onset of COVID-19, the South African basic education sector was known as 'bi-modal', a term used to describe two parallel, yet distinct, schooling systems. One is functional, wealthy, and equips learners with globally competitive skills. The other, made up of over 75 per cent of schools, is dysfunctional, poorly resourced, and unable to equip learners

with the skills they need (Spaull, 2013). The 2016 Progress in International Reading Literacy Study (PIRLS) found that 78 per cent of fourth-grade learners cannot read for meaning in their home language (Howie et al., 2017). Less than half of children who start school in kindergarten, go on to complete twelfth grade (Spaull & Jansen, 2019). In a country battling the highest levels of inequality in the world, this schooling system is replicating and deepening the poverty and privilege divide.

Like the world over, these inequities have been exacerbated by COVID-19. Children attending fee-paying public or private schools were largely able to continue their learning remotely, thanks to digital access, adequate levels of digital literacy, and a home environment conducive to learning. Most students, however, were not so fortunate, and learning came to an abrupt halt. Children in non-fee schools learned 50–75 per cent less in 2020 relative to normal learning (Spaull et al., 2021).

Providing a continuation of learning opportunity across this vast economic and social spectrum of 13 million learners and 25, 000 schools was, understandably, a significant challenge. COVID-19 response measures ranged from online learning for the minority of learners with access to devices and connectivity, to national free-to-air lesson broadcasting for learners reliant on TV and radio access, or WhatsApp and SMS 'classrooms' with teachers engaging learners remotely. One segment of learners, however, fell outside of the range of these efforts. Poorer, younger learners were in a triple bind – unable to lead their own learning, in home contexts with severe structural barriers to digital learning, and at the age where learning loss matters most.

In this case study, we will explore one innovation that delivers remote learning opportunities for this vulnerable group, unpacking why this approach matters now and how it might shape the way we reconsider education in the future.

A HYBRID HOME-SCHOOL EARLY-GRADE LEARNING MODEL

Together In My Education (TIME) is a high-quality, structured home learning programme used by parents and caregivers⁶³ with kindergarten and first grade learners. It aims to develop a culture of learning at home, to improve relationships between schools and homes and, ultimately, to close early learning gaps by advancing learners' language, literacy, mathematics and socio-emotional skills.

The TIME intervention, endorsed by the Western Cape Education Department (WCED), was designed and delivered by Wordworks, a non-profit organization that focuses on early

^{63.} Given the high incidence of households with neither parent available to the child, the term 'caregiver' will be used rather than 'parent' throughout the case study.

language and literacy development in the first eight years of children's lives. Costing 50 ZAR (approximately 3.50 USD) per year per learner, for the weekly provision of hard-copy materials for 32 weeks, this initiative shows potential for scale.

Families receive hard-copy materials via their school, organized in weekly activity cycles, each based on a story theme. Each week consists of five 20- to 30-minute activities that develop language, mathematics and socio-emotional skills, while promoting engagement via games, physical play, contextual learning and creative expression. Teachers are equipped to support caregivers to guide the learning process via weekly broadcast messages using WhatsApp and Moya (a data-free messaging platform), linking to text, audio and video on a data-free website. A physical activity record helps learners develop metacognition by tracking their learning progress and builds connections between home and school by sharing regular updates with teachers. Packs are provided in the three major languages for the Western Cape: English, Afrikaans and isiXhosa.

A network of non-governmental organizations (NGO's) plays an important partnership role in programme delivery, bringing local expertise to support school leadership, community development, materials development ⁶⁴ and early learning⁶⁵.

While this intervention addressed a critical need during learning disruption in South Africa, the longer-term transformative potential of such an approach must be considered as rebuilding education post-pandemic begins. After all, what is innovative about distributing hard-copy materials? The innovation here lies in establishing a highly structured approach to creating the conditions for reimagining schools as learning hubs, where home-school partnerships prioritize student learning.

Looking at the initial learnings emerging from TIME, in the second half of 2020 more than 40,000 learners were reached monthly, increasing to 47,682 learners per month in 2021, across 219 schools (Together In My Education report, 2021). While it is too early to understand the impact of the TIME intervention on child learning and development, a comprehensive exploratory field study has provided insight into programme effectiveness. The following learning emanates from research conducted from July to September 2020, where 548 teachers from 159 schools provided feedback (Wordworks, 2021). Teachers estimated that 82 per cent of participating homes received the materials - 57 per cent of which collected from schools, and 32 per cent sent home with children. Most teachers (81 per cent) rated the home learning materials as an effective way of teaching early literacy and mathematics skills, as outlined in the annual teaching plans. Nearly all teachers (92

^{64.} REDINK is a key partner in early-grade resource development

^{65.} Updated list of TIME partner NGOs is available here

per cent) felt the materials were accessible, rating them as very easy, easy (60 per cent) or somewhat easy (32 per cent) for caregivers to understand. Acknowledging the complexity in understanding the take-up of materials at home, teachers were asked to use their professional judgement on the matter. Teachers felt that over half the class was using the materials at home (70 per cent), with a 37 per cent return rate of the activity records.

Turning to support provided to teachers and caregivers, 84 per cent of teachers said they found the weekly messages very helpful or helpful, with a further 15 per cent saying they were moderately helpful. Teachers expressed a slight preference for video and text format over voice notes. More than half of teachers (63 per cent) said they always passed the messages on to parents, while 26 per cent said they sometimes did. Almost 60 per cent of teachers reported relying solely on WhatsApp to share messages with caregivers. In summary, these survey results indicate that teachers assess the TIME materials as being accessible and pitched at the right level for learners and caregivers, with an appropriate level of teacher support.

There are several challenges and limitations of the TIME intervention to consider (personal interview with S. O'Carroll, founder of Wordworks, 2021). For example, caregivers whose home language differs from the language of schooling are likely to find their ability to support learning at home limited. Another issue concerns assessment of impact. Many of the schools participating in TIME were involved in preexisting programmes to support parental involvement, it is not clear the extent to which take-up of TIME depends on previous cultivation of this 'fertile ground'. It also become clear that programme success depends on teacher motivation, as they are primary mediators of materials and messaging. Furthermore, the athome approach of TIME makes quantifying learner outcome gains challenging. Finally, and critically, the most vulnerable learners and families are less likely to have time and resources to bring to this programme. To ensure equity, these families require additional resourcing and support.

UNDERSTANDING WHY THE TIME PROGRAMME MATTERS NOW

At a time when education has been disrupted to the extent that it has, governments and communities the world over are rethinking how, where and why we educate. Here we consider how the TIME programme has contributed to laying the foundation for a transformational and sustainable approach to building back better, and why it matters at this juncture in our educational evolution:

• **Reshaping the social contract between schools and communities:** Significant change in society requires planned and coordinated adjustments in the implicit agreement between members of a society to cooperate (Deming, 2020). Central to the TIME model

is the formation of a social contract between schools and communities, that sets the expectation that learning can happen from home, requiring mindset and behaviour shifts by all involved.

- **Providing appropriate scaffolding in the midst of change:** Careful consideration was given to the provision of appropriate levels of support for teachers and caregivers, as all embarked on a format of learning that was entirely new and unchartered.
- **Expanding the notion of the educator:** Increasing caregiver involvement in active learning requires that both teachers and caregivers rethink their roles. The teacher's role extends beyond the classroom to reach the home, and caregivers are called to acknowledge the significant contribution they can and must make to support their child's learning journey (Mapp & Kuttner, 2013).
- Centring relationships in learning: The TIME model centralizes relationships in the learning process, acknowledging that learning is, at its core, a social process (UIL, 2020).
 TIME encourages affirming interaction between caregivers and children, discouraging punitive responses to mistakes and creating positive learning routines in homes.
- **Prioritizing engagement**: It was widely acknowledged that children who felt disengaged from school during the pandemic were more likely to drop out of school. One key goal of TIME was to keep learners and families engaged in learning.

AT-HOME LEARNING BEYOND A PANDEMIC

The TIME programme has taken an approach to innovation that starts where the South African education system is and opens the door for increasingly rapid and sustainable change over time, thanks to the school-community ties established at the heart of the intervention.

Perhaps though, prior to considering future possibilities, it is worth pausing to consider the argument for at-home learning beyond the pandemic. Why, if schools are open, should education systems consider continuing home learning approaches with early grade students? At the heart of the argument is the potential to influence early childhood development through active caregiver involvement, as well as the opportunity to dilute the overreliance on resource constrained school environments, where increasingly overcrowded classrooms limit the teacher's ability to provide quality individualized learner attention. Finally, there is an opportunity to embrace inherent cultural capital and honour families' funds of knowledge (Mapp & Kuttner, 2013) in the home by supporting caregivers – many of whom might not have completed high-quality education themselves – to confidently involve themselves in the child's learning.

FUTURE IMPLICATIONS AND POSSIBILITIES

As we look forward, and in the spirit of the Futures of Education initiative, we allow ourselves to imagine several implications of, and possibilities arising from, the foundation laid by TIME and similar programmes, and how this might contribute to building education back better, with the goal of producing lifelong learners who are equipped to actively and purposefully participate in society (Dede & Richards, 2020).

- Schools as learning hubs: As the lines between school and home become increasingly porous, so the idea of schools evolving into hubs of learning becomes a possibility (McShane et al., 2012). Such a school would be a place where learning hours are extended, and students of all ages can learn anytime, in various hybrid formats; a place where the notion of an educator is expanded to include community members and caregivers, and where valuable knowledge and skills are exchanged amongst lifelong learners. To house such reconfigurations to our concept of schooling, the school itself needs to become a learning organization. Schools must move from rigid, bureaucratic and hierarchical to spaces that embody collaboration, adaptability and autonomy. These spaces should take cues from, and interact with, their evolving environments and modify behavior to reflect new knowledge or insights (Kools & Stoll, 2016).
- Augmentation of teacher effectiveness: Teachers' effectiveness will be augmented by their ability to embrace blended learning methodologies that enable and enhance learning at school and at home. The pedagogical repertoire of teachers will expand to weave asynchronous instruction with synchronous and face-to-face learning, supplementing how teachers operate and how information is shared with caregivers and children (Kimmons et al., 2020).
- Developing a breadth of competencies: By deliberately and systematically infusing the development of socio-emotional skills and twenty-first century competencies (e.g. creativity, critical thinking, communication, curiosity) into mathematics and literacy learning at school and at home, students are better prepared for a fast-changing world (Fadel et al., 2015). This acknowledges, at this early age, the importance of developing our learners not simply to be, but to become (UNESCO, 2019).
- Problem-based, contextualized education: As the education ecosystem broadens to include at-home learning, so the opportunity for relevant, context-specific, problem-based education becomes increasingly accessible. Students engage in realworld problem recognition and solving in their surrounding context (Resnik, 2017), developing competencies that are crucial for a more equitable and sustainable world, as envisaged by the UN Sustainable Development Goals.

CONCLUSION

As the global community reflects on a profound opportunity to reconsider an outdated education system, education leaders are presented with the choice of remaining rooted in traditional policies and practices, or taking a leap into unchartered territory. Reconsidering schools as learning hubs to enhance learning opportunity for children in the early grades, is just one such opportunity. To make this possible, decision-makers will need to systematize these approaches into school, district and provincial workplans and key performance indicators. As transition occurs, feedback mechanisms for continued refinement will be critical to success. May this case study provide food for thought, and opportunities for ideation and implementation, as we collectively 'build back better'.

REFERENCES

- Dede, C. J., & Richards, J. (Eds.). (2020). The 60-year curriculum: New models for lifelong learning in the digital economy. Routledge.
- Deming, D. (2020). The robots are coming. Prepare for trouble. The New York Times. <u>Available here</u>
- Fadel, C., Bialik, M. & Trilling, B. (2015). Four-dimensional education: The competencies learners need to succeed. Center for Curriculum Redesign
- Howie, S., Combrink, C., Roux, K., Tshele, M., Mokoena, G. & Palane, N. (2017). Progress in international reading literacy study 2016: South African children's reading literacy achievement. Centre for Evaluation and Assessment, University of Pretoria.
- Kimmons, R., Graham, C. R. & West, R. E. (2020). The PICRAT model for technology integration in teacher preparation. In Contemporary Issues in Technology and Teacher Education, 20(1), 176-198. <u>Available here</u>
- Kools, M., & Stoll, L. (2016). What makes a school a learning organisation? OECD Education Working Papers no.137. OECD Publishing. <u>Available here</u>
- Mapp, K., & Kuttner, P. (2013). Partners in education: A dual capacity-building framework for family-school partnerships. SEDL & US Department of Education.
- McShane, I., Watkins, J. & Meredyth, D. (2012). Schools as community hubs: Policy contexts, educational rationales, and design challenges. Australian Association for Research in Education (NJ1).

- **Resnick, M., & Robinson, K. (2017).** Lifelong kindergarten: Cultivating creativity through projects, passion, peers, and play. MIT press.
- **Spaull, N. (2013).** Poverty & privilege: Primary school inequality in South Africa. In International Journal of Educational Development, 33(5), 436–447.
- Spaull, N., & Jansen, J. D. (2019). South African schooling: The enigma of inequality. Springer. <u>Available here</u>

Spaull, N., Daniels, R. C., Ardington, C., Branson, N., Breet, E., Bridgman, G., Brophy, T., Burger, R., Burger, R., Casale, D., English, R., Espi, G., Hill, R., Hunt, X., Ingle, K., Kerr., Kika-Mistry, J., Kohler, T., Kollamparambil, U., Leibbrandt, M., Maughan-Brown, B., Mohohlwane, N., Nwosu, C., Oyendubi, A., Patel, L., Ranchhod, V., Shepherd, D., Stein, D., Tameris, M., Tomlinson, M., Turok, I., Van der Berg, S., Visage, J., Wills, G., Wittenberg, M. (2021) National Income Dynamics Study Coronavirus Rapid Mobile Survey (NIDS-CRAM). Wave 5 Synthesis Report.

Together in My Education. (2021). At home programme for Grade R and Grade 1 @Weekly report to the WCED: 8 June 2021

UIL (UNESCO Institute for Lifelong Learning). (2020). Embracing a culture of lifelong @learning: Contribution to the Futures of Education initiative. UIL.

UNESCO. (2019). Futures of Education: Learning to Become [brochure]. UNESCO.

Wordworks. (2021). @Home early language and literacy pilot for Grade R and Grade 1. Second mid-pilot report: January 2021

About the author

Shirley Eadie leads the Education Innovation Unit at the National Education Collaboration Trust in South Africa. Her work focuses on understanding how to gear basic education systems for resilience and relevance in a fast-changing world, equipping all learners to thrive during and beyond school. She is a candidate for an EdM in International Education Policy at the Harvard Graduate School of Education.



Edited by

ISSN 2566-7106 ISSN 2566-8315 (electronic) ISBN 978-3-030-82158-6 ISBN 978-3-030-82159-3 (eBook) https://doi.org/10.1007/978-3-030-82159-3 The COVID-19 pandemic caused serious disruptions to education around the world. On short notice, and without a playbook to draw on, teachers, schools, and education systems had to quickly create alternative education arrangements to sustain the right of education during the crisis created by the rapidly spreading plague. While the shortcomings of these quickly improved arrangements to educate remotely are becoming increasingly obvious, less attention has been given to the ways in which these novel ways to educate represent an innovation with implications for the efforts to build a more relevant and effective education system.

The goal of this book is to examine the potential of the innovations generated during the pandemic. Drawing on a systematic analysis of 31 educational innovations that emerged during the pandemic, we examine their value not just to mitigate the impact of the crisis, but to build back better.

The result of a collaborative effort of UNESCO's International Bureau of Education and of the Global Education Innovation Initiative at the Harvard Graduate School of Education, this book makes visible some of the innovation dividend generated by educators during the pandemic while offering a methodology for others to advance knowledge about what education systems learned during the pandemic.

The new report of UNESCO's International Commission on the Futures of Education Reimagining our Futures Together: A new social contract for education calls for broad based and inclusive social dialogue on how to transform education to address the most significant challenges of our times. This book is a contribution to that dialogue that shows that the transformation of education environments that address such challenges began amidst the deep disruptions caused by the greatest education calamity in the history of public education.

WWW.IBE.UNESCO.ORG



International Bureau of Education

UNESCO - IBE C.P. 199 1211 Geneva 20 Switzerland Tel.: +41.22.917.78.00 Fax: +41.22.917.78.01

Novembre 2021