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Post-Pandemic Planning and Global Education

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The Challenge Ahead of Us

Believe it or not, there will be a day in the not-too-distant future when crisis management moves to sober lessons learned. Then, a flurry of reports, conferences, and even a few inquisitions, will follow. Learning from these lessons will be critical to our future health and well-being, especially since it is true that the next crisis is a matter of when and not if.

Of the many facets of normal life that were completely upended by the pandemic and merit a thorough review, education–where and the way we learn–experienced some of the greatest turbulence. Seemingly overnight, teachers, students, learners of all ages, were being asked to do things they had not done before in ways they had not been trained for or experienced. Anyone with any responsibility for children suddenly became teachers, IT experts and policy wonks. Education was both everything and everywhere, particularly on the front page of newspapers, and nothing and nowhere for the upwards of 1.5 billion children worldwide[1] who were shut out from access to basic education.

Puerto Rico has taken the dramatic step of literally failing the bulk of its students, deploying a stunning administrative tool to reset the year while seeking major cash injections to deal with so-called learning loss as a result of the pandemic[2].

In 2020, Kenya mandated that primary and secondary school students would repeat the forthcoming year[3]. Many from Odisha in India[4] to Ontario in Canada are offering abridged curricula so that students can focus on core subjects. The impacts are universal but the ability to recover from them will not be.

We need a plan and traditional responses will not do the trick. Without concerted effort now to draw out lessons and think creatively about them, longer-term solutions are unlikely to emerge.

We can change that. First, let us start where we are now.

Politicians in every single country are so mired in the crisis today that their capacity to think beyond the pandemic is heavily constrained. It is constrained by lack of time, energy, and because public pressure is largely on the here and now.

The policymakers–the bureaucrats–are more critical now than ever. Policymakers need to start by bifurcating their focus: there needs to be a strong team focused on recovery alone.

This briefing is designed to help that group of policymakers think about that challenge, offer a few lessons from history, and provide a framework for improving on where things were left off back in early 2020.

1 UNESCO Global Education Coalition, ED/GEC/2021/01/REV, **https://en.unesco.org/covid19/educationresponse/globalcoalition**

2 AMPR asks for a strategic plan due to the failure of 24 thousand students of the public education system. June 2, 2021. La Perla del Sul. **https://www.periodicolaperla.com/ampr-pide-plan-estrategico-ante-fracaso-de-24-mil-estudiantes-del-sistema-publico-de-ensenanza/**

3 Kenya's Unusual Solution to the School Problem: Cancel the Year and Start Over. August 5, 2020. Abdi Latif Dahir. New York Times. **https://www.nytimes.com/2020/08/05/world/africa/Kenya-cancels-school-year-coronavirus.html**

4 Odisha Minister Clarifies On Reopening Of Schools, Syllabus Reduction. June 23, 2021. Vikash Sharma. Odisha TV Online. **https://odishatv.in/news/education/odisha-minister-clarifies-on-reopening-of-schools-syllabus-reduction-55695**

Start Where we are Now

Seventeen months into this pandemic and well over a billion children[5] are still entirely without access to education. Others have experienced a mix of start/stop lessons delivered over a range of media, including radio, TV, laptops, tablets and phones with curriculum often too basic, inaccessible or dependent on a parent or caregivers who may not be equipped or available to serve as teacher's aide[6].

As many countries begin contemplating post-pandemic recoveries, we already know that education will be front of mind. From Bolivia to Belgium to Bangladesh to Baltimore, pesos, euros, pounds, and dollars are being earmarked for education recovery, to mitigate so-called learning loss and plug gaps in access, technology and training that long predated the pandemic.

From July 28-29, UK Prime Minister Boris Johnson and Kenyan President Uhuru Kenyatta hosted the Global Education Summit[7], which was all about financing the next five years of the UN's Global Partnership for Education (GPE). The summit invited world leaders to make pledges to support GPE's work to help transform education systems in up to 90 countries and territories.

There will be other such conferences and on the face of it that is good news. Cash injections for education are badly needed.

Who can argue with a tablet for every child or scoff at finally connecting remote, rural, and disadvantaged communities to learning opportunities?

However, a massive rollout of financing does not guarantee that spending will be used to maximize learning and resilience in learners. Too often, it goes to addressing immediate needs and too little goes to addressing longer term systemic changes necessary to bridge education gaps and attainment.

Those immediate needs are understandable: a roof, books, teacher training and certification, hardware; but if we are going to avoid the mistakes of the past and create an environment and framework where lessons can truly be learned, we need to hear the words of Andreas Schleicher, the OECD's Director for Education and Skills, when he says that we need, "...to integrate technology into teaching and learning, to provide educators with learning environments that support 21st century pedagogies and provide children with the 21st century skills they need to succeed in tomorrow's world."[8] We need to integrate technology into teaching and learning.

5 UNESCO Global Education Coalition. **https://en.unesco.org/covid19/educationresponse/nationalresponses#WESTERN%20EUROPE%20&%20NORTH%20AMERICA**

6 ibid

7 **https://www.globalpartnership.org/events/global-education-summit-financing-gpe-2021-2025**

8 OECD (2015), Students, Computers and Learning: Making the Connection, PISA, OECD Publishing, Paris, **https://doi.org/10.1787/9789264239555-en**

Technology needs to be a fundamental part of the recovery in education

That is a bold statement. When it comes to online learning, the experience of the last year has by and large been a frustrating one. But is it technology itself that is the issue or the type of technology, its application, whether teachers and parents felt supported and trained in using it, whether it was straightforward to use, and whether it truly engaged the student in his or her learning journey? Is it not a good thing to have a tool that can be switched on when events conspire to close schools? Is it not a good thing for a teacher to extend his or her reach beyond a classroom?

What we need to be thinking about now is how to integrate technology into learning?

Serious investments and commitments are being contemplated right now. We cannot repeat the mistakes of the past.

Lessons that should be learned

Providing a device to every student or connecting every community are highly worthwhile endeavours but on their own will not improve outcomes.

In December 2012, former Mexican President Enrique Peña Nieto signed the Pact for Mexico. The Pact included a sweeping national program to provide notebook computers with connectivity for all 5th and 6th grade students in public schools. The intent was to promote digital literacy and eLearning.

The program started with a pilot in the Mexican States of Tabasco, Colima and Sonora and 2 billion pesos, approximately $100 million USD, were programmed in the budget and the program was created, including a dedicated portal and website. There was great optimism the day of the launch. The final assessment was rather less optimistic, and some headlines were downright negative in their indictments of the program.[9]

What happened?

First, as is often the case with national procurement projects, the focus rapidly shifted to what national governments do well, or are at least better equipped to do well, namely procurement and distribution. In Mexico, that effort happened so swiftly that the equipment arrived often before schools had any training on how to integrate and use them. Many came preloaded with programs that were unknown to teachers. Over 20% of the laptops had failures that became the responsibility of schools, or worse parents, to cover the cost to fix and in many jurisdictions, even where laptops were working fine, connectivity remained a challenge. Further, teacher training was too often devolved to jurisdictions, which in the absence of coordination from the centre, fell by the wayside, creating competing approaches to online pedagogy, and exacerbating the issues with the rollout. In 2015, the Ministry of Public Education launched an evaluation of the pedagogical value of the program and by 2017, the program no longer had a budget.[10]

9 Center for Economic and Policy Research. The Pact for Mexico after Five Years: How Has It Fared? June 2018. Mark Weisbrot, Lara Merling, Rebecca Watts, and Jake Johnston. **http://cepr.net**

10 Ibid.

Mexico is by no means alone. 1:1 programs–a broad term for providing one laptop or tablet for each child–have been in existence since John Negroponte's much-hyped and sadly ill-fated 'One Laptop, One Child' Initiative, which ultimately failed just a few years ago[11]. American districts of education, Australian states, authorities in southeast Asia, have all experimented or delivered a form of this program.

A report by researchers from Brookings examined in part, whether investments in technology made a positive impact on measurable learning outcomes. The conclusion showed mixed results. When you consider investments in technology have doubled as a proportion of the investments made by the World Bank, OECD and others in developing education, that begs more than a few questions about the efficacy of these programs without–and this is critical–a comprehensive approach to the rollout[12].

11 A Blurry Vision: Reconsidering the Failure of the One Laptop Per Child Initiative. Spring 2021. Namank Shah. Boston University. **https://www.bu.edu/writingprogram/journal/past-issues/issue-3/shah/**

12 Realizing the Promise: How can education technology improve learning for all? 2021. Alejandro J. Ganimian, Emiliana Vegas, and Frederick M. Hess. Brookings Institution. **https://www.brookings.edu/essay/realizing-the-promise-how-can-education-technology-improve-learning-for-all/**

New investment needs to be reoriented, redefined, and entirely refocused around building resilience

Unless simultaneous investments and innovations occur in pedagogy, curriculum, assessment, and school organization, the time and effort expended on investing and using the tools of new hardware produce few improvements in educational outcomes—a result that reinforces many educators' cynicism about how a laptop or tablet will change everything. In and of itself, it will not.

Spending capital is easy. It does not require a large policy lift or stakeholder engagement plan in the way policy reform coupled with targeted and appropriate new spending does. A headline-grabbing spend of billions on equipment turns heads and demonstrates action. It does not lead to longer term educational outcomes.

A new framework for building resilience in education

The pandemic impacted all students, but it did not affect them all equally. Lost learning opportunities and social-emotional distress were felt more acutely, sometimes severely, by those ill-equipped to make the transition to online learning, exposing and exacerbating equity gaps. Adding broadband capacity and links is a good investment. Providing laptops, tablets and phones is another. Those comprise but one leg of a stool that must be supported by two others, namely a comprehensive digital curriculum, an always available instructional platform, instructor training/readiness, synchronous and asynchronous capability, to withstand shocks and extend the reach of the classroom, and instructor training/readiness and supports so that teachers and instructors can add this critical bow to their pedagogical quiver. Only then can we build resilient students and a resilient system ready for the next event while providing additional learning opportunities for all each day in the meantime.

Investments in hardware are a good thing but it must be complemented by investments in appropriate software and professional development, and all of it must be tied towards a longer-term goal that builds resilience. By taking on this work, policymakers and leaders are ensuring that their education systems will continue providing services in the face of disturbances, regardless of what those disturbances are.

At the same time, in implementing the practices of resilience discussed in the next sections, policymakers and leaders will foster a less tangible but nevertheless crucial aspect within the system: a mindset of resilience. That mindset is critical to withstanding future shocks, creating independent and resilient learners and equipping them with the skills they will need to embrace the ever-changing economy that will not wait for them to catch up.

The pandemic therefore provides a catalyst, and a responsibility, to build a system more resilient to foreseeable disturbances. The push to resilience can also be a further catalyst to reimagine the future of teaching and learning. School practices that enable resilience also support effectiveness, equity, and are necessary to building a high-performing system.

Given the likelihood and potential significance of future disturbances, basic education or primary/secondary school systems should therefore consider resilience as fundamental–along with effectiveness and equity–to being high-performing.

High performing education systems exhibit these qualities of excellence and equity across their core functions:

- **resource allocation –** manage and disburse capital assets and operational budget, including facilities, technology, staff, curricular resources, etc.
- **governance –** design and operate structures and process to facilitate strategic and operational decision making, including elected board, superintendent, district administrators, and school staff and teachers.
- **education delivery –** employ resources (e.g., technology, curricula, educators) to provide instruction and services to support student readiness, wellness, and learning success.

In combination, we would therefore traditionally think of a high-performing basic education or primary/secondary school system as one that effectively and equitably allocates resources, governs, and delivers education services.

However, we saw during the pandemic that–despite the committed efforts of educators–even historically high-performing school systems struggled. The impact on low-performing systems, low-income regions, or countries, and on historically disconnected populations was crushing.

Learning Loss: Failing Concept

No one denies this past year has not been good for learning outcomes and learner growth. However, the first thing policymakers should lose is the concept of 'learning loss' as a starting point for the recovery. It has been intentional here to describe it as 'so-called learning loss' because while the concept is not unimportant, it is a negative prism through which to look at the issue and puts an extra burden on teachers and students to make up for something they had no hand in losing in the first place.

Common to the debate on addressing is which of two paths to take: start over or distil the lessons that were supposed to be learned over the last year into the most salient parts and drill those into students, leaving other lessons out in an effort to 'catch-up'?

There is a third way: start where each student is now and extend the reach of the classroom with personalized tools that allow students to pick up what they need, at their speed, in the way they like to learn, in addition to the instruction received in the classroom. This is not about technology facilitating more homework. This is about technology facilitating more learning, engaging students in ways teachers just cannot in the classroom, providing new pathways for students who are excelling in a subject, and more tailored pathways for those who are struggling.

Now is the time to build resilient systems and resilient learners

*This section has been adapted for from D2L's, "**How to Build a Resilient K-12 School System: A Guide for Local Education Leaders**", by Mark Schneiderman and Howie Bender. It has been substantively modified to account for global contexts, different systems of governance, and in anticipation of the need for increased post-pandemic assistance and funding worldwide.*

Policymakers need to start based on the capacity of their systems today. Each education system is unique. They vary in structure, size, funding streams, capacity, access, historical or current conflicts surrounding them, location, and a myriad of other features. Resilience must be a priority for each and every one of them.

To build resilience, system leaders must clearly define what resilience could look like under their unique circumstances.

To that end, system leaders seeking to improve resilience should undertake the following steps:

1. Apply the definition of a resilient system to the unique context and circumstances of the system.
2. Identify the types of disturbances that the system is most likely to encounter and the elements that the system must have to effectively weather those disturbances, proactively where possible to minimize disruption.
3. Assess the principles of a resilient system and work with leadership teams to develop initial hypotheses about the most important principles to implement to build a resilient system.

With respect to #3, a resilient local basic education or primary/secondary school system exhibits certain principles foundational to its current capacity and future capability to exhibit resiliency. These beliefs and behaviors are fundamental preconditions and characteristics.

Our research has found that, to be resilient, any local basic education or primary/secondary school system should address these five principles:

- **Tight-Loose Integration:** A resilient basic education or primary/secondary school system adopts common learning, technical integration, and process standards and requirements and establishes norms, criteria, and expectations that guide decisions (i.e., tight) while enabling staff to make decisions and choices within that framework (i.e., loose) with a mindset of efficacy over compliance.
- **Empowered Schools and Staff:** A resilient system empowers schools and staff with flexibility and authority to be creative and make decisions, adopt resources, and implement services in a timely manner that best address their unique campus/population needs, provided they do so within the parameters of districts standards and requirements.
- **Redundant and Extendible:** A resilient system values and curates' multiple options for meeting needs, is boundaryless, and leverages partnerships to build redundant, diversified, and extendible systems so that if one method or modality is not operating, effective, or otherwise meeting needs, then other options are available.

- **Adaptable to Change:** A resilient system is adaptable and evolving by continuously expecting change, collecting information to identify and evaluate potential disturbances, and applying new understanding and modifying practices to anticipate, mitigate against, and reduce negative impact of disturbances.
- **Authentic and Accessible Communication and Feedback Loops:** A resilient system has strong two-way communications to meaningfully understand stakeholder needs, build an authentic vision and shared accountability, deliver clear, candid, accessible, and timely information to create a strong culture and provide voice and agency.

We can think about applying these resilience practices across the three core functions of local basic education or primary/secondary school systems:

- What resources are available and how are they used?
- What is the governance structure and how are decisions made?
- How are instruction, curriculum, and student services delivered?

Identify what needs to change

System leaders enter this step of the change management process with a **vision** for their resilient system and **initial hypotheses** on how to get there. To make that vision a reality, system leaders must conduct a **clear-eyed assessment of what needs to change.**

This section guides leaders in assessing what needs to change in their system using the practices of a resilient system outlined in the **K-12 System Resilience Workbook**. Leaders will work with their leadership teams to:

- Analyze the system's ability to implement new practices of a resilient system.
- Prioritize the practices of a resilient system based on current state and needs.
- Gather stakeholder feedback to refine the priority list of practices.

Now plan and prepare

System leaders enter this step of the change management process ready to **pilot the priority list of practices of resilience** endorsed by the leadership team and stakeholders.

To pilot the practices, systems must have a **comprehensive implementation plan for piloting** and the necessary **enabling conditions are in place to execute that plan**. At this stage, system leaders will pilot one of the priority practices they identified.

Equipped with leadership team support and buy-in from stakeholders, leaders will continue to collaborate with others to move forward. To prepare for implementing a practice of resilience through pilots, leaders will:

- Determine where and how a practice will be piloted.
- Create and execute comprehensive scope and sequence for implementation.

Pilot, test, repeat

Scale. Take a systems approach. A patchwork leaves too many holes and too few areas of commonality critical to system-wide evaluation.

At this stage, leaders pull back up to the Building Systems cycle, **ready to scale the practice system wide**. Leaders enter this stage equipped with a **practice and implementation plan perfected through piloting, lessons and best practices** from those pilots, and the **certainty that the practice should be implemented** at scale.

To successfully implement this practice system wide, system leaders must:

- Determine at what scale to implement the practice.
- Gradually implement the practice at the determined scale.

We have all heard variations of the slogan, 'build back better'. If we are going to do that in education, we need to build resilience. We need to build resilient learners and systems, so the former is provided a pathway by the latter to reach their goals.

In building resilience, education systems move from emergency response to optimizing and transforming education. Those systems which have managed well through COVID-19 are those which were already preparing for the future of learning. Those who for reasons of connectivity, conflict or a complete lack of basic services were unable to prepare for the last year are in even greater need of this approach. Technology in developing economies is often seen as a panacea and technological tools as a chance to leapfrog older technology and rapidly join the innovation economy. That is all true but only if we add those other legs to the stool.

In the February 2010 issue of the Journal of Technology, Learning, and Assessment, the authors were commenting on the same issues we face yet again today. For those authors, the point of any far-reaching educational technology is not the mastery and success of said technology, but the improvement of the process and environment in which teaching and learning occur. The technology needs to be part of a package with learning as the central objective.[13]

This concept of resilience and how technology is central to it is critical. This needs to be the central frame for discussions later this month at the Global Partnership for Education's Summit.

Connectivity, equipment, platforms, pedagogy, people, learners, teachers, professional development, policy and a firm grasp on what tomorrow's economy needs to look like are all the critical components in building the future of learning. No one element will succeed without the other and as we have all learned, no one solution will get us out of this crisis and no one tool will prevent the next one. Now is the time to finally learn the lessons of the past and apply them. Now is the time to build resilient systems and resilient learners. The future of every learner is at stake.

13 The End of Techno-Critique: The Naked Truth about 1:1 Laptop Initiatives and Educational Change PUBLISHED: 2010-02-04, Mark E. Weston, Alan Bain. The Journal of Technology, Learning and Assessment. **https://ejournals.bc.edu/index.php/jtla/index**

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About D2L

D2L is transforming the way the world learns–helping learners of all ages achieve more than they dreamed possible. Working closely with clients all over the world, D2L is supporting millions of people learning online and in person. Our global workforce is dedicated to making the best learning products to help people reach their full potential. Learn more at **D2L.com**.

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