





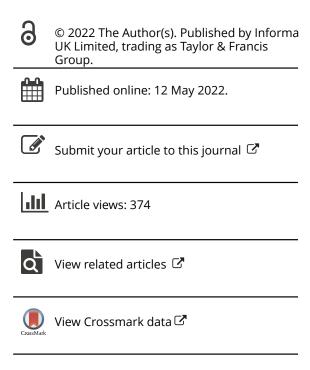
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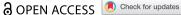
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# Covid and the future of education: global agencies 'building back better'

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Framed by the mantra of 'Building back Better' (BBB) the Covid-19 Pandemic has inspired myriad proposals to transform education systems for the future. We interrogate the phrase 'building back better', focusing on its origins and application within crisis narratives. We analyse responses to the pandemic published by influential global agencies focusing on their agendas and visions for the future of education. We identify the common and divergent elements in their narratives, illustrating how the crisis was used to promote each organisation's specific interests, and how these narratives were sustained through strategic silences and the selective use of evidence. Whilst the pandemic was used to promote the different longstanding agendas of those agencies, we argue that overall it was used to constrain the future as a privatised techno-utopia, rather than build towards a new vision.

#### **KEYWORDS**

Build Back Better; Covid; **Education Futures: Global** Agencies

#### Introduction

The Conference theme raises myriad questions including: building back from what; by whom; better than what, and for whom?

We address those questions through an analysis of the responses to the Covid pandemic by major multilateral organisations and corporations; namely, UNESCO, UNICEF, OECD, World Bank, Pearson PLC, and McKinsey & Company. We focus on them because they illuminate how bodies at the centre of the 'globalisation of education policy' (Hogberg and Lindgren 2021, 302) have responded to Covid and sought to shape the future of education. Although their missions and mandates vary, by virtue of what they promote, assess and fund, they exert a powerful influence on education throughout the world, in particular in low-income nations that rely on external funding.

The article is structured as follows: a brief overview of the origins of BBB and the links between disasters (or, crises) and reform; the introduction of the analytic framework; a review of emerging trends and the priorities of key agencies prior to the Covid-19

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pandemic; and, an analysis of reports published by these agencies in response to the pandemic, identifying key features of their narratives, omissions, and their use of evidence.

BBB was popularised when it was adopted by the Third UN World Conference on Disaster Risk Reduction in 2015 which focussed on natural disasters. Since the Covid pandemic the BBB maxim has become ubiquitous and been linked to a vast array of policy initiatives. It invites us to adopt an aspirational perspective that reframes the pandemic as an opportunity to imagine a better world and to enact policies and practices which will transform education.

There are precedents that support this perspective, for example the bubonic plague contributed to the demise of serfdom. By forcing the momentary retraction of global capitalism (industry, trade, travel), the current pandemic has also had a positive, albeit temporary, effect on the natural environment.

However, that aspirational discourse requires scrutiny, as crises have long provided an opportunity to initiate radical processes of reform, often with questionable motives and variable consequences. Milton Friedman concisely explained their potential in 1982:

Only a crisis - actual or perceived - produces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around. That, I believe, is our basic function: to develop alternatives to existing policies, to keep them alive and available until the politically impossible becomes politically inevitable (Friedman 2002, xiv).

That claim was made with reference to the successful insertion of the Chicago School's brand of neo-liberalism into Chile and Argentina in the 1970s. Allan Meltzer in 2002 elaborated on the strategy:

Ideas are alternatives waiting on a crisis to serve as the catalyst of change. Friedman's model of influence was to legitimize ideas, to make them bearable, and worth trying when the opportunity comes (as quoted in Klein 2007, 140).

Jones (2012) argues that a series of economic crises throughout the 1960s and 1970s helped to destabilise the policy consensus of the post-war years and gain legitimacy for neoliberal ideas. Klein (2007) described the rise of 'disaster capitalism', detailing how the destruction wrought by Hurricane Katrina in 2005 provided an opportunity to replace the New Orleans public school system with semi-privatised Charter Schools. Recently, Klein (2020) describes the collaboration between New York City and the Gates foundation to develop a 'screen new deal' as creating a high tech dystopia. Such opportunism is however not a monopoly of Capitalist or Western regimes (Vickers and Morris 2022), with the current pandemic being used by authoritarian states to scapegoat minorities in India and Myanmar and suppress political dissent in Hong Kong and Thailand.

In brief, natural disasters and crises serve as a catalyst for interested parties to transform the status quo (Zancajo, Verger, and Bolea 2022), overcome resistance to reform and initiate radical changes in public policy. The Covid-19 pandemic began as a global health crisis that spawned economic, social, political, and educational crises. Problems associated with the extended closure of schools and uneven access to online learning thus provide an opportunity to analyse how key agencies responded to the same crisis and envisioned the future of education.

Faced with the closure of educational institutions, governments quickly implemented various forms of distance education as an emergency response to help pupils learn at home (Srivastava et al. 2021), however the length of these closures varied markedly between nations. The technologies, described as 'pandemic pedagogies' (Williamson, Eynon, and Potter 2020, 108), ranged from the use of television, radio to synchronous and asynchronous digital provision. Overall, the responses we analysed promoted two claims regarding the opportunities that Covid-19 provided for education:

- (1) it highlighted and exacerbated longstanding inequalities within and across education systems and demonstrated the need to address them
- (2) it demonstrated the benefits of alternative means of delivering education, which provide a model of the post-pandemic future

The first claim was central to scholarship citing evidence that the closure of schools and the move to remote learning have exacerbated the longstanding problems faced by disadvantaged groups of pupils within and across school systems and that the overall outcomes of learning via pandemic pedagogies have deteriorated.

The second claim was stressed in the responses of multilateral organisations and corporations that are central to the global governance of education. Their claims emphasise the importance of technology and online learning as a solution to the crisis; the role of private organisations in developing and delivering this technology; the apparent demand among stakeholders for enhanced access to educational technologies following the crisis; the greater promise of technology beyond the crisis, enabling access to equitable, quality education for all, and transforming education to meet the needs of the 21st century. We focus on the second category of claims.

We identified a corpus of 30 documents which allowed us to analyse each organisation's overall narrative of the future of education and how they have constructed those visions. Boyatzis (1998) data driven inductive approach to thematic analysis was used to identify the shared themes and those which were distinctive to each agency. Table 1 shows the primary source of the direct quotations we cite.

Our analysis mirrors existing analyses of trends prior to the pandemic and those which focussed on the early response to the pandemic (Williamson and Hogan 2020). Hillman, Bergviken Rensfeldt, and Ivarsson (2020) predicted the 'platformisation of schooling' (13), especially in systems where schooling has been broken-up, decentralised and marketised. They argue that it is leading to 'a situation with little state governance where the dominant technical platforms are amongst the few centralising powers uniting schools as a national school system' (7–8).

**Table 1.** Titles of the selected sampling documents.

OECD (2020a)	Schooling disrupted, schooling rethought: How the Covid-19 pandemic is changing education
UNESCO (2021)	Supporting learning recovery one year into COVID-19: The Global Education Coalition in action
UNICEF (2021a)	COVID-19 and school closures: one year of education disruption
World Bank (2020)	Realising the Future of Learning: From Learning Poverty to Learning for Everyone, Everywhere
McKinsey (2020)	Reimagining a more equitable and resilient K–12 education system
Pearson (2020a)	The Global Learner Survey – Aug 2020
McKinsey (2020)	Reimagining a more equitable and resilient K–12 education system

Williamson, Eynon, and Potter (2020) highlight the need for critical scholarship on 'pandemic pedagogy' (108), which needs to be viewed as promoting a rapid 'prototype of education as a private service and an opportunity to recentralize decentralized systems through platforms' (109). They argue that this trend is being enabled by the OECD, WB and UNESCO, continuing trends previously identified in the context of the SDGs (Auld and Morris 2021). Shultz and Viczko (2021) similarly conclude from their analysis of the early responses of those organisations to the pandemic that 'all three responses privilege private sector providers of digital technology . . . bringing significant risks for the erasure of local knowledges' (1).

There is an extensive literature on the history of global educational governance, detailing the rise of new actors and the complexity of interactions between multilateral agencies. Although research acknowledges the limits of their mandate and influence, Gleckman (2018) interrogates the move towards multi-stakeholder governance (MSG), which involves nations relinquishing power to those involved with promoting, providing and selling the product or service in question. This he argues raises fundamental concerns, including: whose voices are included and excluded; the institutionalisation of a democratic deficit; the absence of accountability; and the abandonment of 'a conflict of interest' as a matter of ethical concern.

We respond to these concerns by analysing how influential agencies construct and adapt the BBB narrative, locating variations across the publications with regard to their respective missions and priorities, identifying critical omissions and interrogating their use of evidence.

# II. Analytical framework: promissory narratives of crisis and hope

Our analysis draws upon two strands of scholarship; the role of stories in policy advocacy and the role of crises in envisioning the future. As Cohen and Garet (1991) observe, proposals for change are persuasive when part of a 'grand story: a large and loose set of ideas about how society works, why it goes wrong and how it can be set right' (125). Singh (2017) characterises efforts by international organisations to improve human well-being and uplift millions from poverty as 'one of the greatest stories begun in the last century' (134). Singh (2017) elaborates:

The idea of international development is a story . . . with no fixed content. But it does allow various organizations, states, and peoples to connect. In this sense, the idea of international development constitutes the 'imagination experience' for improving human conditions in the developing world (136).

The pandemic provided the key elements (crisis, solutions and promissory futures) that allowed international organisations to provide an 'imagination experience' by retelling that grand story through the mantra of BBB, stressing their role and applying it beyond the developing world.

Building on this literature, Auld and Morris (2021) have developed a heuristic schema that depicts policy stories in the form of a classic three-act tragicomic play. *Act 1* introduces *the setting*, a strategic portrayal of the world situation, including imaginaries of how things are, could or should be. This is developed into 'the call', which identifies an event or undesirable condition, framing it as a crisis requiring an urgent response. *Act 2* 

introduces the path to salvation, whereby blame is designated and a solution is provided, with villains who caused the crisis and heroes who will save us. Act 3 presents an idealised (or 'better') future, with fortunate or fatal ends that reflect the classic themes of comedy and tragedy. Either the listener (i.e. protagonist) accepts the proposals, and it will end, happily. Or rejects them and prepares for a tragic end.

For the purposes of our analysis we briefly elaborate on the role of crises and portrayals of the future within this schema. Crises as a catalyst for reform have long been recognised in the policy literature (e.g. Stone 1989) and represent a key stage in stories of change. Following Friedman, these may be 'actual' crises, such as pandemics, or 'perceived' crises. By defining the nature and causes of a crisis, actors impose their view of social reality on others through a process of strategic framing. This determines what conditions are considered problems that require attention, the values and objectives prioritised, and the desired future trajectory. This lays the foundations for what Stone (1989) terms 'causal stories' (282), which connect the problem and its source, the policy solution and its provider, and the solutions with the desired end.

Stone (1988) identifies two common themes: (i) the 'story of decline' (110) (stagnation, or failure to improve), which frames the crisis with regard to wider systemic problems (eg. a learning crisis); and (ii) the 'story of control' (113), whereby a situation that was once beyond our control is now subject to human agency and therefore amenable to intervention. The story of control is primarily linked to advances in technology, or by positioning proposed reforms as scientific and evidence based. The development of such policy stories is a process of narrowing possibility, whereby in the beginning anything is possible and in the middle certain things seem probable, in the end the proposed solutions seem both necessary and inevitable, inspiring optimism for the future.

Beckert's (2020) concept of 'promissory legitimacy' (319) which refers to the legitimacy a political actor derives from the credibility of promises regarding future outcomes is pertinent. By addressing a crisis and promising to BBB, agencies seek legitimacy for interventions by developing 'promissory narratives' of hope. Although the idealised future portrayed in Act 3 may never be realised, recent scholarship has emphasised the influence such futures have on the present. Focusing on that relationship, Adams, Murphy, and Clarke (2009) stress the central role of anticipated futures in contemporary policymaking:

'The present is governed, at almost every scale, as if the future is what matters most. Anticipatory modes enable the production of possible futures that are lived and felt as inevitable in the present, rendering hope and fear as important political vectors . . . Through anticipation, the future arrives as already formed in the present, as if the emergency has already happened ... '(248-249)

They argue that anticipation has epistemic value and is underpinned by 'speculative forecasts' not rooted in the 'the sciences of the actual' (247). They identify three templates for framing the future: Optimisation, to secure the best possible futures; Preparedness, for trauma or crises; and Possibility based on techno-scientific optimism, hope and speculation.

We use the three-act schema outlined above to unpack the agencies' promissory narratives and to identify how they handle the questions raised at the outset. In Act 1, we focus on how they define the nature and causes of the crisis, reframing it as an opportunity and presenting 'the call' for radical transformation in education. *Act 2* identifies how blame is designated and the corresponding solutions, including claims regarding the wider benefits of technology and variation in the specific policies proposed to build a better future in the post-pandemic era. In *Act 3*, we reflect on portrayals of what we are building towards. Our analysis identifies an overall tendency towards speculative forecasting which utilised variations of the frames identified earlier. However the nature of these portrayals varied with regard to the organisations' missions and priorities.

# III. Preamble: priorities and policies pre-Covid-19

To identify the ideas which were 'waiting' on a crisis' we briefly survey the wider setting and entwined agendas of the agencies prior to COVID-19. Though not exhaustive, we highlight (i) the widespread acceptance of a 'learning crisis' in low-income nations and the emphasis on access to quality and equitable education under the SDGs; (ii) the increasingly central role played by private organisations under the SDGs, notably through the promotion of public-private partnerships, (iii) the rise of discourses promoting the digital transformation of societies and schooling, including the use of online platforms and artificial intelligence in education under the mantra of 21<sup>st</sup> century schools; (iv) the role played by private organisations in promoting this discourse and its acceptance by key agencies involved in education governance.

These trends reflect the inevitable tendency of the technology industry to see education, and subsequently the pandemic, as a business opportunity, and for global agencies to see it as an opportunity to intensively promote both their longstanding agendas and strategic narratives.

UNESCO's vision on information and communication technology in education was spelt out in the Qingdao Declaration of 2015 titled: 'Seize Digital Opportunities, Lead Education Transformation'. This was 'inspired by a humanistic vision of education based on human rights and social justice' to 'accelerate progress toward SDG 4' (UNESCO 2015). Partnerships and international cooperation were listed and encouraged as the means to 'create equitable, dynamic, accountable and sustainable learner-centred digital learning ecosystems' (UNESCO 2015, 8). More recently, the current Director-General Azoulay (2018) averred: 'AI can be a fantastic opportunity to achieve the goals set by the 2030 Agenda' (37), identifying 'possible contributions of AI to inclusive education and assessing its potential impact on the future of learning' (38).

Access to the Internet was deemed central to achieving the SDGs, with 'The Internet for All initiative' established to facilitate collaboration and alignment between public and private sector stakeholders. The 2nd AI for Good Global Summit in 2018 promised to 'take action to ensure that AI accelerates progress towards the SDGs,' listing Pearson and Microsoft as partners. Microsoft (2017) envisaged a digital transformation of education, driven by an intergovernmental community built by education technology leaders, a community including UNESCO and Pearson.

Prior to the Pandemic, Pearson had reoriented its business towards digital platforms in 2013, outlining plans to automate education through AI (see Olson 2018). The technology was promoted as more efficient and effective, but also hitched onto

a humanitarian frame by promising enhanced access to equitable, quality education (Li and Auld 2020). Earlier in 2011, Pearson acquired Connections Education to operate online or virtual schools (Wall Street Journal 2011).

The OECD stressed the implications of AI and the coming digital and data revolution for education, and the value of technology for transforming 21<sup>st</sup> century education. Angel Gurría, OECD Secretary-General, provides an example of speculative forecasting:

The kinds of things that are easy to teach are nowadays also easy to digitise and automate. In the age of artificial intelligence (AI) we need to think harder about how to develop first class humans, and how we can pair the AI of computers with the cognitive, social and emotional skills, and values of people (OECD 2019, 3).

The OECD had long promoted the use of technology as part of its new vision for education. Based on a questionnaire in the 2015 PISA test, it concluded:

School systems need to find more effective ways 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. (OECD 2015, 1)

Similarly, McKinsey's promotion of the digital transformation returned to the period of the 2010's but stressed the dimension of governance and organisation. 'McKinsey Digital', which originated from 'McKinsey Digital Labs' launched in 2013, advocated the shift into 'a lifelong digital education model' and insisted 'all stakeholders can benefit if they seize new opportunities for collaboration' in the context of pervasive digital disruption in education (McKinsey 2016). This model emphasised 'personalised/adaptive learning with predictive analytics' and 'new competency-/outcome-based delivery' (2) and greater use of 'digital unbundling' (4) for more flexible learning.

UNICEF has advocated the roles of technology and the broad range of partners in enhancing the access to digital education. In 2019, 'Delivering learning opportunities anywhere, to anyone, at anytime' was highlighted for the connectivity in 'Every Child Learns, UNICEF Education Strategy (2019-2030)' (UNICEF 2019). In the same year, Giga, a UNICEF-ITU global initiative, was launched 'to connect every school to the Internet by 2030' (UNICEF 2020).

The WB has been promoting 'Digital technologies in education' particularly to reduce poverty in developing countries (Trucano 2016) and in 2018 it promoted partnerships with governments and organisations around the world for developing innovative projects and knowledge sharing.

Below we analyse their key texts through the structure of the three acts to understand how the pandemic provided an opportunity to promote the ideas and agendas that were already in motion (Zancajo, Verger, and Bolea 2022), variously guided by optimisation, preparedness and future possibilities. Initially we focus on the core shared features of the narrative across the organisations and subsequently we identify their variations.



# IV. Building back better: a story of hope

# Act 1. The Covid-19 crisis and the call of opportunity

The texts are all initially positioned as responses to crises arising from the pandemic (mass closure of schools and uneven access to education), with strategic framing unfolding in three interwoven strands to develop the call. First, they define the nature of the crisis and its implications. Second, they expand the frame by noting that the crisis has merely exacerbated existing inequalities that reflect deep systemic problems. Finally, echoing Friedman, the call is stretched beyond the immediate crisis to reframe it as an opportunity to reimagine education and build a better future. The varied portrayals of the nature and consequences of the crisis are illustrated here:

'COVID-19 further increases the cost of achieving SDG 4' (UENSCO 2020a, 3)

'The COVID-19 pandemic is a challenge to global governance (UNESCO 2020b, 1) ... every government around the world has grappled with ensuring continuity of learning and minimizing educational disruption.' (4)

'The COVID-19 pandemic caused an unprecedented crisis ... triggering a humanitarian, socio-economic and human/child rights crisis.' (UNICEF 2021b, 3)

'The costs of school closure and the associated learning losses go beyond the lower incomes that this cohort of students can expect. A less skilled work force also implies lower rates of national economic growth.' (OECD 2020b, 12)

'COVID-related school closures could increase the learning poverty rate in low- and middleincome countries (World Bank 2020, 12) ... the resulting reduction in human capital accumulation and productivity.' (7)

'The pandemic is driving an even greater chasm in the digital divide. Learners also struggle with the affordability of education ... They see the social justice reckoning happening in so many communities. (Pearson 2020a, 3)

Significantly, the reports stress that the pandemic has merely highlighted and exacerbated longstanding inequalities in education:

COVID-19 threatens to deepen existing inequalities in learning among and within countries. For the most marginalized learners, learning losses may be even more significant. (UNESCO 2021, 54)

School closures are expected to exacerbate the learning crisis that existed before the pandemic, with the most vulnerable children being the most adversely affected. (UNICEF 2021a, 3)

While the impact of the pandemic is portrayed as catastrophic, the extent of the disruption opens a window to imagine and enact alternatives rather than return to the status quo. The texts reframe the crisis as an opportunity for transformational change as illustrated below:

Launched at the beginning of the COVID-19 pandemic, the Global Education Coalition has become a force for change ... as we look to transform and reimagine the education of the future. (UNESCO 2021, 2)

Table 2.	Framing	the	crisis	and	the	solutions.

OECD	Human capital for economic growth
	21 <sup>st</sup> century competencies/school/curricula
	<ul> <li>Innovation/Entrepreneurship</li> </ul>
UNESCO	Sustainable development goals
	<ul> <li>Flagships of Connectivity/Gender</li> </ul>
UNICEF	Children's rights
	Digital learning as an essential service
World Bank	<ul> <li>Human capital for economic development</li> </ul>
	Learning poverty
	<ul> <li>System-wide reform – learners/teachers/schools/system management</li> </ul>
McKinsey	<ul> <li>Innovation in organisational management</li> </ul>
	<ul> <li>Flexible/Agile school structures and policies</li> </ul>
Pearson	<ul> <li>Access to learning/skills for economic growth/social mobility</li> </ul>
	Online learning as an educational choice

The crisis has revealed the enormous potential for innovation that is dormant in many education systems (OECD 2020a, 7) ... We can seize the moment to make curricula and learning environments more relevant to the needs of the 21st century. (9)

Transforming education delivery and accelerating progress in learning might seem aspirational ... But there is a window of opportunity for reform and for more impactful investments. (World Bank 2020, 18)

The COVID-19 crisis is a signal that school systems around the world need to move beyond existing approaches to embrace more radical innovation, rethinking some fundamental elements. (McKinsey 2020, 4)

Education has the potential to improve lives and enable economic mobility . . . We are in the midst of a moment in which we can rewrite the future of education to make it more accessible and equitable. (Pearson 2020a, 3)

Although each organisation reframes the crisis as an opportunity to reimagine education the nature of the visions vary, Table 2 summarises the different ways the crisis and its solution were framed.

Predictably these framings reflect each organisation's ideological positioning and mission. Thus the OECD framed the crisis in terms of human capital and envisages the digital transformation as a new normal for innovation in education and 21C skills; UNESCO and UNICEF's framing focusses on the SDGs and children's rights respectively, reflecting their more humanitarian agendas; the WB frames it in terms of poverty reduction and economic growth, calling for system-wide education reforms; McKinsey highlights the scale of the crisis and emphasises capabilities gaps and organisational management issues; and Pearson similarly stresses the scale of the crisis, but focusses on the need for choice and a market for education.

# Act 2: Designating blame & building back better

The subsequent identification of problems and solutions to the crisis are interwoven with, and difficult to disentangle from, the visions of the future, and there are two broad themes shared across the organisations: (i) BBB will require enhanced access to technology and online learning, and; (ii) private organisations will play a central role in designing and delivering this digital future. These are primarily promoted with a view

to 'optimising' the future through techno-scientific 'possibilities', though 'protection' is also evident; many of the proposed solutions could also be interpreted as promoting the interests and agendas of the relevant organisation.

To begin, blame for the immediate crisis (lack of access to technology and online learning) is generally attributed to inadequate resources, which has resulted in poor connectivity and limited access to technology during the pandemic. The focus on inadequate resources allowed minimal consideration of the effectiveness of such technologies. This was translated into a more general problem of access:

Disadvantaged students experience larger learning losses than their peers during out-ofschool periods, probably because they lack resources at home, and are therefore likely to fall even further behind during school closures. (World Bank 2020, 16)

The COVID-19 pandemic has made the digital divide more obvious between those who have access to technology for learning and those who don't. (Pearson 2020a, 21)

To guard against similar crises and disruptions in the future the solutions are:

The proven innovative solutions tested in the context of the Coalition's work will be reviewed and harnessed to support national efforts and nurture local ecosystems to advance education systems' resilience and transformation. (UNESCO 2021, 19)

The greater use of remote learning approaches, along with better support for parents and caregivers, can be used as a launching pad to build more equitable, more resilient education systems. (World Bank 2020, 18)

These proposals are limited to addressing the crisis directly (ensuring access) and are guided by the need to provide protection against future catastrophes.

While lack of resources and inadequate investment in technology are identified as a key problem, governments and trade unions are implicitly, and sometimes explicitly, blamed; portrayed as slow, unresponsive, or as barriers to change. For example:

Labour-management relations may also either facilitate or impede innovation ... it is essential that both governments and teacher unions embrace the value of innovation ... and create an entrepreneurial culture in education. (OECD 2020a, 8)

There is now both the political will and a sense of urgency to take on the challenge of fixing long-broken delivery models (McKinsey 2020, 2) . . . we don't want to be held back by inertia or continue with failed experiments. (8)

Identifying systemic failures in education, the shortcomings of government bureaucracy and professional associations, and the inadequacy of traditional schooling defines a wider array of problems that extend far beyond access to technology. Although the pandemic necessitated the shift to online learning, extending and embedding these changes as the crisis recedes required its advocates to demonstrate its capacity to address problems which precede the pandemic:

But beyond the COVID-19 pandemic ... Access to online and to independent learning using technology can facilitate the acquisition of essential 21st century competencies. (OECD 2020a, 7)

Technology is essential to transform traditional models of delivering education, make systems more resilient, and accelerate progress in learning. (World Bank 2020, 17)



Digital learning could be the great equalizer in education ... to radically scale-up digital learning solutions which work for the most marginalized children and young people. (UNICEF 2020, 2)

Technology has made the model (Personalized, mastery-based learning) even more compelling, enabling personalization at a level that's impossible to achieve in the traditional classroom. (McKinsey 2020, 4)

People see the potential for online learning to expand access to education. (Pearson 2020a, 20)

By establishing technology's potential possibilities to overcome systemic problems, realise elusive ideals and transform education for the 21st Century, the texts move from a focus on protecting us from future crises to a focus on optimising the future.

Having established the promise, the second theme is developed, namely that this can best be delivered through more 'collaboration, cooperation and partnerships' between governments and the private sector:

Technology-based innovations open up schools to the outside world ... new actors into the system, including the education industries with their own ideas, view, and dreams about what a brighter future for education could hold. (OECD 2020a, 8)

The Global Education Coalition's distinctive model of multi-stakeholder partnerships deepens civil society and private sector engagement ... and helps countries to develop national education resources and home grown responses. (UNESCO 2021, 81)

Reimagining education is possible, but only if the public and private come together. (UNICEF 2020, 2)

Innovative public-private partnerships can help increase the use of EdTech. (World Bank 2020, 44)

Smart systems will also expand their partnership networks, collaborating with academia to bring the best of learning science, with employers to create linkages to the workplace, and with philanthropists to access funding. (McKinsey 2020, 8)

Pearson is uniquely situated to collaborate with governments worldwide to face the disruption caused by the pandemic and help build innovative solutions to expand equitable access. (Pearson 2020b, 29)

While the narratives across the reports aligned regarding the need for change, there was significant variety in their interpretations, and the nature of their preferred policies, reflecting their priorities and portrayals of the future. Table 3 summarises how each organisation envisioned both the nature of technology and of the public-private partnership. The OECD positioned technology for facilitating the promotion of personalised learning and the acquisition of 21C skills; UNESCO and UNICEF were concerned with ensuring greater access to the internet; the WB focussed on big data, AI and machine learning; and McKinsey and Pearson focussed on blended learning and virtual schooling. UNICEF portrays the relationship between the public and private sectors as an equal partnership with both contributing different strengths. The other organisations develop a narrative in which the private sector provides innovation, expertise and dynamism to a bureaucratic public sector which is the beneficiary of their help.

#### Table 3. Technology for the future and partnerships.

OECD (2020a)

Technology for the future

- Digital Infrastructure: for online and remote learning facilitating essential 21st century competencies beyond schools
- Blended modalities of teaching and learning: for personalised and independent learning and extended learning time and opportunities
- A new expanded blended ecosystem: integrating the spaces, time, people and technologies into an ecosystem
- For innovation in education systems
- Connectivity (Internet): Scale up distance learning and connect every learner and institution to the Internet to bridge the digital divide (usually in low/middle income countries)
- From no-tech, to low- and hightech: TV, radio, online learning platforms, education resources, digitised curricula/assessments, and learning management
- Alternative education delivery systems: design and preparation of alternative education delivery systems and instruction by learning levels, than by age or grade
- Teachers' digital capacity: digital skills, digitisation of content, remote learning and pedagogies, and online assessment
- Connectivity (internet) for the most marginalised: Giga as a UNICEF-ITU global initiative to connect schools to Internet
- Devices: smartphones, tablets, laptops and desktop computers for learning anywhere and anytime
- Affordable digital content and data: zero rate contents for learners, parents and teachers to decrease barriers of entry to digital content and applications
- World-Class Digital Learning Solutions: Al and machine learning for personalised learning and digital learning platforms for disseminating and collecting information

Technology for the future

Partnerships (Roles of the private and/ or public sector)

- New alliances and partnerships: technology and telecommunications companies for an expanded learning ecosystem
- Redesign and facilitate public procurement processes (of educational software/resources): to break the cartel of a few large suppliers and overcome the slow sales cycles
- The private sector as an innovator: bring new actors into the education system, including the education industries with their own ideas about the future for education
- The private sector as experts: 175 institutional partners representing a wide range of expertise and competencies in the UNESCO's Global Education Coalition (GEC)
- The private sector as global resources, services and solution providers for connectivity (free and secured technological solutions)
- National governments as needs requestors or beneficiaries: of the global solutions in GEC
- Partners to advise on technical solutions for connectivity in schools and explore finance structures with governments: subsidising market creation costs and incentivising private sector investment
- Partners as device/service suppliers: to identify device needs and reduce the cost of devices or find low-cost solutions (eg. Mobile Network Operators not to charge for educational websites or apps)
- Partners to scale-up digital learning solutions, upskill teachers/facilitators in digital learning and pedagogies, and support data and analytics

Partnerships (Roles of the private or public sector)

(Continued)

UNESCO (2021)

UNICEF (2020)

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World Bank (2020)

McKinsey (2020)

Pearson (2020a;2020e;2021b;2021c)

- Edtech for adaptive and personalised learning (by learning level): adaptive software for personalised learning and teaching at the right level, a proven effective pedagogical strategy, and data/evidence-based decision-making
- Big data and machine learning tools: assess students' level, map competencies, and track progress in open learning systems to provide personalised, high-quality digital content, facilitating the use of student-centred pedagogical practices
- AI, machine learning and big data analytics for data-driven decision-making as a potential game-changer: learning management systems to collect and use data and help data-driven decision-making for managerial and pedagogical decisions
- Software solutions for remote and hybrid learning for a future of blended personalised learning in class
- Smart adaptive-technology programmes for personalised/mastery-based learning and for more efficient and fair assessments: integrating instruction, practice, and feedback to allow students to work at their own pace and making formative assessments immediate, efficient, and fair
- Advanced technology for teacher training and development: virtual teacher practicum programme to provide learning experience before the teachers' first day
- Virtual schooling accelerated by the recent pandemic: more college, university, primary, secondary students will attend school virtually (online)
- Online/distance learning as a preparation for the event of an emergency or another COVID-19 pandemic disruption
- Personalised student data/ insights for assessment communication and adaptive learning capabilities

- Innovative public-private partnerships to increase the use of EdTech
- The public education sector to strive for flexible, expandable, compatible, interoperable financing/procurement systems: addressing market information asymmetry and devising innovative financing and procurement strategies for digital infrastructure.
- Partners to provide technological solutions and education management information systems to reduce the burden of administrative duties for school leaders and teachers
- A diverse set of stakeholder groups as well as governments to use data to make data-driven decisions when data is presented in open formats for public information
- Technology companies to offer diverse digital softwares and programmes – eg. simSchool (a virtual practicum programme), Bridge International Academies (scripted lesson plans on tablets)
- **Employers** to create linkages to the workplace
- Philanthropists to access funding
- Academia to bring the best of learning science for the future of education

- Governments to help schools prepare for the switch to online and fund devices for underserved learners
- Pearson as an alternative education provider: Purpose-built online schools as alternatives to school-as-place
- Pearson as an expertise provider in digital learning: hotlinestaffed by expert Connections educators for teachers

The commercial organisations illustrate most vividly how the future was framed through a combination of optimisation and possibilities. McKinsey, after echoing the need for more private sector involvement and innovation to achieve greater equality, focused on the need for organisational innovation and a new role for teachers:

The stress of remote and hybrid learning is already catalyzing some systems to rethink teacher roles and allocation (McKinsey 2020, 6) ... Longer term, systems might consider a more radical unbundling of the role of the teacher, enabling individuals to take on more differentiated roles that play to their strengths, preferences, and areas of expertise. (7)

Saltman (2020) provides an explanation of the rationale for this focus on the role of teachers:

In the case of educational privatization, the standardization and homogenization of curriculum, pedagogical approaches and school models aim to maximize the possibilities of profit through 'economies of scale', and by automating and displacing the most expensive element of schooling: teacher labour. (Saltman 2020, 203)

In parallel, McKinsey promotes their consultancy services and the COVID-19 Response Toolkits that they developed with UNESCO. Pearson is more explicit in promoting a future in which digital education replaces 'traditional schooling', marketing its own services as central to the new future:

The disruption created by COVID-19 is moving many to investigate full time digital learning for the first time. Connections Academy, our Virtual School's business, is seeing strong increases in application volumes (Pearson 2020c, 1)

Will a full-time online school be for every student? Probably not, but for many it is, and will be, the perfect school choice (Pearson 2020d, 1)

#### Act 3: Building a better future for all?

What are we building towards, will we ever arrive at this destination, and who will benefit from this better world? Act 3 lies perennially ahead. Visions of the future continually order the present through narratives that variously aim to optimise it, protect us and envisage possibilities.

On one level, a better future is identified comprised of ideals, such as 'a fairer world for all', 'an end to poverty', enhanced 'equity' and 'quality' in education, with more 'efficient' and 'effective' systems, 'personalised' learning, 'greater connectivity' delivered by innovative systems unencumbered by traditional bureaucracy. On another level, we identify speculative forecasts that framed the future with regards to a nascent digital transformation and the new demands placed on education by the 21st century. Despite differing orientations, the frames overlap and are mutually reinforcing, with both narrative threads stressing the importance - and necessity - of expanding access to digital solutions, the further integration of technology and online learning into schooling, and the role of private organisations in designing and delivering this transformation. Finally, there was a strong emphasis on the *possibility* of a better alternative model of education in the future in which technology facilitates the achievement of elusive ideals and brings intractable problems into the realm of control. The narratives have been framed in such a way that only the proposed solutions are responsible and necessary; previous and ongoing exercises designed to envision the future of education in other ways (eg UNESCO's 'Futures of Education: Learning to Become' initiative in 2019) are largely ignored; including the impact of climate change (Rappleye and Komatsu 2020). Although these promissory narratives offer to transform education, what actual evidence is drawn upon to support the post covid visions?

# V. From speculation to evidence: BBB on what basis?

Earlier we noted the central role of 'crisis' and 'control' within policy narratives, whereby the story of control is most often developed with reference to the scientific basis of proposals. Bridges, Smeyers, and Smith (2009) argue that the call for rationally applied evidence is, 'often and almost always in the context of policy-making, an expedient fiction, a ritual of justification' (5). COVID provided agencies, especially the OECD, whose legitimacy is largely derived from the self-portrayal of its scientific expertise and its knowledge of the future with a powerful opportunity for advocacy. Following Adams, Murphy, and Clarke (2009), our analysis identified a notable absence of empirical evidence in reports, which instead were primarily based on speculation and promissory narratives. We analysed the evidence presented to support the better future, what emerged was a pattern of selectivity, omissions and silences. Whilst references to the 'learning crisis' and exacerbated inequality were central to Act 1 the focus was on the shortage of technology, there was little discussion of research exploring the impact of technology and public-private partnerships on learning quality and equality, either before or during the pandemic. For example, Bonal and González 2020 assert that prior to Covid, students' outcomes resulting from online learning had been shown to be poorer than from face-to-face learning. Analysts argue that algorithms used to interpret Big Data increase inequality (O'Neil 2017) and encode both racial and gender bias (Noble 2018). The effects of public-private partnerships on educational quality and equality in low-mid income countries have also been long challenged (Verger 2012). These are mirrored in the extensive research which has explored the digital divide and how it has increased during the pandemic. Srivastava et al.'s (2021) study of seven European countries describes children and parent's negative experiences of digital home schooling during Covid. Langthaler and Bazafkan (2020) demonstrate how the problems in low-income nations have been amplified during Covid and the INEE (Interagency Network for Education in Emergencies) (2021) described the role of the private sector in providing such pedagogies in Francophone Africa. They argued that it:

... raised serious inequality and inequity concerns due to a deepened digital divide, problematic long-term impacts on educational systems, the increased commercialization of education, disregard for student privacy, the failure to pay teachers' salaries, and exploitative practices through which companies seek to profit from this global crisis. (INEE [Interagency Network for Education in Emergencies 2021, 14)

Similar concerns, before the pandemic, resulted in the promulgation of the Abidjan Principles in 2019 which identified how Governments could ensure that Private providers upheld those rights (ibid.). Nevertheless, Covid has accelerated the pressures for privatisation by a wide range of actors (Shultz and Viczko 2021; INEE [Inter-agency Network for Education in Emergencies 2021).

Saltman (2020) argues that evidence demonstrating that technology enhances learning simply does not exist, while Komatsu and Rappleye (2021) examined the OECD (2015) questionnaire data (cited above) and concluded:

... not only did the OECD's own evidence fail to support the claim that learning and technology were linked, but the data seemed to point in the opposite direction (i.e., the highest performing East Asian education systems did not subscribe to the belief in technologically mediated achievement solutions) (248).

Meanwhile, the main evidence used in the orgnisations' documents to promote a digital future relied on their own questionnaire surveys designed to elicit opinions on the pandemic. Table 4 below shows their titles and the participants.

Government officials were reported to believe that digital education should continue beyond the pandemic whilst teachers were described as giving low marks to digital learning across the board. Notwithstanding, McKinsey (2021) concluded that:

Teachers see the difficult challenges remote learning presents to their students, but also the opportunities that virtual classrooms offer to connect in new ways. (10)

A tendency to speculative and selective reporting of the evidence is well illustrated in the Pearson Survey (2021a). The front page is filled with positive findings and big colourful images about the benefits of remote learning: self-sufficiency, resilience, and competencies for the future of work. The emphasis of the report was drawn to the positive findings including '43% want more flexible options powered by technology (full-time online or hybrid school)' (1). Despite the contradictory key findings, - 'Parents see a future with online learning, 'Parents are concerned about learning loss and social isolation' (1) – the report concludes: 'but the majority believe most kids will "bounce back quickly and with valuable new skills" (1). Meanwhile, reporting of negative findings such as 'The prepandemic mental health issues impacting young people continue to be a problem' (2) was

Table 4. Organisations' surveys during Covid.

	Survey	Participants/Period	Purpose
UNESCO, UNICEF, World Bank (2020)	<ul> <li>What Have We Learnt?: Overview of Findings from a Survey of Ministries of Education on National Responses to COVID-19.</li> </ul>	<ul> <li>1st round: Ministry of Education officials of 118 countries (May – June 2020)</li> <li>2nd round: Ministry of Education officials of 149 countries (July- Oct 2020)</li> </ul>	To allow for policy learning across the diversity of country settings to better inform local/national responses
OECD (2021)	<ul> <li>The state of education – one year into COVID.</li> </ul>	<ul> <li>Government authorities of 31 education systems</li> <li>Jan – Feb, 2021</li> </ul>	<ul> <li>To support countries' looking out- wards to how other education systems are responding to similar challenges</li> </ul>
McKinsey (2021)	Teacher survey: Learning loss is global – and significant	<ul> <li>Teachers in Australia/ Canada/China/ France/ Germany/ Japan/UK/USA</li> <li>late Oct – early Nov 2020</li> </ul>	<ul> <li>To examine the impact of remote education on student learning through the perspective of teachers</li> </ul>
Pearson PLC (2021a)	<ul> <li>A Year That Changed Everything: Learning in a Pandemic – The Pearson and Connections Academy Parent Pulse Report: March 2021</li> </ul>	<ul><li>1,052 K-12 parents in the US</li><li>Feb 18–26, 2021</li></ul>	<ul> <li>To provide parents/ teachers/ school systems with insight into how online learning during the pandemic – one year later – has evolved.</li> </ul>

inconspicuous. The fact that parents' positive views about online learning - 'I like the flexibility that online learning provides' - declined over time (Pearson 2021a, 6; 2020f, 8) was also ignored.

Across the reports there emerged a pattern of omissions. The three most significant were: (i) the role of teachers and local communities in identifying or initiating solutions; (ii) the tendency to ignore evidence which was inconsistent with the narrative; (iii) a tendency to avoid substantive evaluation of whether pandemic technologies had effectively addressed the 'learning crisis.'

The collaborations and partnerships featured in the reports identify the relevant stakeholders as local and global companies that provide technology platforms, multinationals and philanthropists. The public sector often features, not as the primary responder to the Pandemic, but in a role supporting the more dynamic private sector. There is little recognition that community organisations, civil society, teachers or schools might play a role in shaping the future of education other than as groups that should be consulted. The approach is an inherently top-down centralised market model with schools and teachers being cast as consumers of platforms provided by the global agencies and the private sector.

Where evidence emerged which did not fit with the narrative extolling the benefits of technology, this was briefly acknowledged in the text, or accompanied by the concession that whilst technology and remote learning would be central to both protecting us from future crises and optimising the future, they should not be viewed as a panacea. Although references to the 'learning crisis' and educational inequalities were central elements of the narratives, there was little attempt to revisit those and evaluate the extent to which they had been mitigated by the organisations' solutions promoted before Covid (eg. partnerships).

#### **Conclusion**

It is now possible to revisit the questions we raised at the outset.

The core narrative employed can be summarised thus: the pandemic has resulted in an unprecedented 'learning loss' and widened existing inequalities that reflect systemic problems in education; the disruption provides an opportunity to BBB and ensure a future with greater fairness, equality, resilience etc; the solutions require enhanced connectivity, access to technology and online learning; the optimal means to deliver these solutions and overcome the prevailing inertia within the public domain is for the innovative and entrepreneurial private sector to play a more central role.

The master narrative was thus a model exercise in speculative forecasting that anticipated the future through optimisation, preparation and promoting possibilities to deliver two distinct agendas, namely; digital provision and enhancing the role of the private sector in ways which ranged from governments supporting them to working in collaboration with them. This combination of ways in which the future was anticipated was harnessed to promoting the contemporary agendas and power of the various organisations, a process akin to what Facer (2016) describes as 'colonising' the future. Despite the varying orientations of the narratives across the organisations, they are mutually reinforcing and entwined to form what Adams, Murphy, and Clarke (2009) term an 'affective regime'. No alternatives are available other than variations in the policy actions promoted, placing responsibility and pressure on governments to respond accordingly. Crucially, and in keeping with the democratic deficit and conflicts of interest associated with MSG, the architects of these better futures will not be held accountable for the delivery of their vision. If proposals fail to yield the promised outcomes, promissory legitimacy is protected through claims that others simply failed to implement the blueprints correctly. And soon, a new crisis or speculative forecast will frame the calls for action within an updated vision as we return to Act 1.

Beckert (2020) asks why neoliberalism has remained hegemonic and prospered despite not delivering on its promises. He describes its core tenet as:

The promissory regime of neoliberalism centres around the understanding that the governance of societies should rely on an increase in competition and the introduction of markets in all social realms. Alternative mechanisms of governance, particularly state interference with markets, are considered to be normatively and functionally inferior and need to be revised. (320)

He argues that it is so deeply embedded and malleable that no viable alternative narrative is available. Covid provides an illustration of that embeddedness and malleability. Despite: the private sector being bailed out in many nation states; the public sector serving as the primary respondents to the crisis; and, the exaggerated claims as to the benefits of technology the pandemic has been harnessed to construct a narrative which promotes the tenet quoted above (Williamson and Hogan 2020).

As we look to the future, maybe we need to stress that there are alternative visions, including those published by UNESCO (2021b) and narratives which are rooted in the present (eg INEE [Inter-agency Network for Education in Emergencies] 2021; the Abidjan Principles in 2019), that recognise: the omissions and silences we have identified; the limitations of speculative forecasting; the role of self-interest; the problems and issues which will emerge if the policies are enacted; and, the neoliberal ideology which underpins the prevailing narrative.

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#### References

Adams, V., M. Murphy, and A. E. Clarke. 2009. "Anticipation: Technoscience, Life, Affect, Temporality." Subjectivity 28: 246–265. doi:10.1057/sub.2009.18.

Auld, E., and P. Morris. 2021. "A Never Ending Story: Tracing the OECD's Evolving Narratives within A Global Development Complex." Globalisation, Societies and Education 19 (2): 183-197. doi:10.1080/14767724.2021.1882959.

Azoulay, A. 2018. "Making the Most of Artificial Intelligence." The UNESCO Courier 3 - Artificial intelligence: the promises and the threats. https://en.unesco.org/courier/2018-3/audrey-azoulaymaking-most-artificial-intelligence

Beckert, J. 2020. "The Exhausted Futures of Neoliberalism: From Promissory Legitimacy to Social Anomy." Journal of Cultural Economy 13 (3): 318–330. doi:10.1080/17530350.2019.1574867.

Bonal, X., and González S. (2020). "The impact of lockdown on the learning gap: family and school divisions in times of crisis." Int Rev Educ, 66(5-6), 635-655. doi:10.1007/s11159-020-09860-z



- Boyatzis, R. 1998. Transforming Qualitative Information: Thematic Analysis and Code Development. Thousand Oaks, CA: Sage.
- Bridges, D., P. Smeyers, and R. Smith. 2009. "Educational Research and the Practical Judgement of Policy-Makers." In Evidence-based Education Policy: What Evidence? What Basis? Whose Policy?, edited by D. Bridges, P. Smeyers, and R. Smith. Oxford: Wiley-Blackwell, 1-10.
- Cohen, D. K., and M. J. Garet. 1991. "Reforming Educational Policy with Applied Social Research." In Knowledge for Policy: Improving Education through Research, edited by D. S. Anderson and B. J. Biddle, 123-140. London: Falmer Press.
- Facer, K. 2016. "Using the Future in Education: Creating Space for Openness, Hope and Novelty." edit by Lees, H. and Noddings, N. In The Palgrave International Handbook of Alternative Education. London: Palgrave Macmillan, 63-78.
- Friedman, M. 2002. Capitalism and Freedom: Fortieth Anniversary Edition. Chicago: University of Chicago Press.
- Gleckman, H. 2018. Multistakeholder Governance and Democracy: A Global Challenge. London: Routledge.
- Hillman, T., A. Bergviken-Rensfeldt, and J. Ivarsson. 2020. "Brave New Platforms: A Possible Platform Future for Highly Decentralised Schooling." Learning, Media and Technology 45 (1): 7-16. doi:10.1080/17439884.2020.1683748.
- Högberg, B., and J. Lindgren. 2021. "Outcome-based Accountability Regimes in OECD Countries: A Global Policy Model?" Comparative Education 57 (3): 301-321. doi:10.1080/ 03050068.2020.1849614.
- INEE (Inter-agency Network for Education in Emergencies). 2021. "Private Engagement in Education in Emergencies: Rights and Regulations." New York, NY. https://inee.org/ resources/private-engagement-education-emergencies-rights-and-regulations
- Jones, D. S. 2012. Masters of the Universe: Hayek, Friedman, and the Birth of Neoliberal Politics. Princeton: Princeton University Press.
- Klein, N. 2007. The Shock Doctrine: The Rise of Disaster Capitalism. Toronto: Alfred A. Knopf Canada.
- Klein, N. 2020. "Screen New Deal: Under Cover of Mass Death, Andrew Cuomo Calls in the Billionaires to Build a High-tech Dystopia." The Intercept, May. 9. https://theintercept.com/ 2020/05/08/andrew-cuomo-eric-schmidtcoronavirus-tech-shock-doctrine
- Komatsu, H., and J. Rappleye. 2021. "Rearticulating PISA." Globalisation, Societies and Education 19 (2): 245-258. doi:10.1080/14767724.2021.1878014.
- Langthaler, M., and H. Bazafkan. 2020. "Digitalization, Education and Skills Development in the Global South: An Assessment of the Debate with a Focus on Sub-Saharan Africa." ÖFSE Briefing
- Li, X., and E. Auld. 2020. "A Historical Perspective on the OECD's 'Humanitarian Turn': PISA for Development and the Learning Framework 2030." Comparative Education 56 (4): 503-521. doi:10.1080/03050068.2020.1781397.
- McKinsey. 2016. "Enabling Seamless Lifelong Learning Journeys—the Next Frontier of Digital Education" Article, December 21. https://www.mckinsey.com/business-functions/mckinseydigital/our-insights/enabling-seamless-lifelong-learning-journeys-the-next-frontier-of-digital-
- McKinsey. 2020. "Reimagining a More Equitable and Resilient K-12 Education System." McKinsey Article, September 8. https://www.mckinsey.com/industries/public-and-social-sector/ourinsights/reimagining-a-more-equitable-and-resilient-k-12-education-system
- McKinsey. 2021. "Teacher Survey: Learning Loss Is Global—and Significant." McKinsey Article, March 1. https://www.mckinsey.com/industries/public-and-social-sector/our-insights/teachersurvey-learning-loss-is-global-and-significant
- Microsoft. 2017. "Leading Countries of the World in the Digital Transformation of Education." https://educationblog.microsoft.com/wp-ontent/uploads/media/MicrosoftEducation\_ LeadingCountries.pdf
- Noble, S. U. 2018. Algorithms of Oppression: How Search Engines Reinforce Racism. New York, NY: NYU Press.



- O'Neil, C. 2017. Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy. London: Penguin Books.
- OECD. 2015. "New Approach Needed to Deliver on Technology's Potential in Schools" OECD Education, September 15. https://www.oecd.org/education/new-approach-needed-to-deliveron-technologys-potential-in-schools.htm
- OECD. 2019. "PISA 2018 Results (Volume I): What Students Know and Can Do." https://www. oecd.org/education/pisa-2018-results-volume-i-5f07c754-en.htm
- OECD. 2020a. "Schooling Disrupted, Schooling Rethought: How the Covid-19 Pandemic Is Changing Education." OECD Policy Responses to Coronavirus (COVID-19).
- OECD. 2020b. "The Economic Impacts of Learning Losses". OECD Education Working Papers.
- OECD. 2021. The State of School Education One Year into the COVID Pandemic. Paris: OECD Publishing. doi:10.1787/201dde84-en
- Olson, P. 2018. "Building Brains: How Pearson Plans To Automate Education With AI" Forbes, August 29, https://www.forbes.com/sites/parmyolson/2018/08/29/pearson-education-ai/?sh= 703630041833
- Pearson. 2020a. "The Global Learner Survey Aug 2020." https://plc.pearson.com/sites/pearsoncorp/files/footer-image/pearson-global-learners-survey-2020.pdf
- Pearson. 2020b. "Annual Report and Accounts 2020." https://plc.pearson.com/sites/pearson-corp /files/annual-reports/Pearson\_AR20\_Online\_210426.pdf
- Pearson. 2020c. "Pearson COVID-19 and Current Trading Update." Accessed May 16. https://plc. pearson.com/sites/pearson-corp/files/pearson/files/covid-19-and-trading.pdf
- Pearson. 2020d. "The New High School Normal" Includes Online Learning and a Day off for Civic Engagement." Accessed May 16. https://www.pearson.com/news-and-research /announcements/2020/10/\_the-new-high-school-normal-includes-online-learning-and -a-day-o.html
- Pearson. 2020e. "Pearson Uses Global Reach to Provide Learning Tools, Expertise for Those Affected by Pandemic" Pearson News, March 23. https://plc.pearson.com/en-GB/news/pearsonuses-global-reach-provide-learning-tools-expertise-those-affected-pandemic
- Pearson. 2020f. the Ups & Downs: schooling during a pandemic The Pearson and Connections Academy Parent Pulse Report: May 2020. https://www.pearson.com/content/dam/global-store/ global/resources/Pearson Parent Pulse Survey.pdf
- Pearson. 2021a. "Parent Pulse Report A Year that Changed Everything: Learning in A Pandemic." https://www.connectionsacademy.com/parent-pulse
- Pearson. 2021b. "What the Pandemic Has Revealed about the Essence of School." https://www. pearson.com/uk/news-and-policy/blogs/2021/04/what-the-pandemic-has-revealed-about-theessence-of-school.html
- Pearson. 2021c. "Pearson Acquires Spotlight to Provide Personalized Education Experience for All Students and Families" Pearson News, February 26. https://plc.pearson.com/en-US/news/pear son-acquires-spotlight-provide-personalized-education-experience-all-students-and-families
- Rappleye, J., and H. Komatsu. 2020. "Towards (Comparative) Educational Research for a Finite Future." Comparative Education 56 (2): 190-217. doi:10.1080/03050068.2020.1741197.
- Saltman, K. J. 2020. "Artificial Intelligence and the Technological Turn of Public Education Privatization: In Defence of Democratic Education." London Review of Education 18 (2): 196-208. doi:10.14324/LRE.18.2.04.
- Shultz, L., and M. Viczko. 2021. "What are We Saving? Tracing Governing Knowledge and Truth Discourse in Global COVID-19 Policy Responses." International Review of Education. May 18: 1-21.
- Singh, J. P. 2017. "Beyond Neoliberalism: Contested Narratives of International Development." In Forging the World: Strategic Narratives and International Relations, edited by A. Miskimmon, B. O'Loughlin, and L. Roselle, 134-163. Ann Arbor: University of Michigan Press.
- Srivastava, P., Cardini, A., Anderson, S., Bhatty, K., Gagnon, A., Jenkins, R., Matovich, I., Moriarty, K., Reuge, N., and Séguin, T. 2021. "Rebuilding Education Systems for Recovery - A Crisissensitive and Equity Focused Approach." https://www.g20-insights.org/policy\_briefs/rebuild ing-education-systems-for-recovery-a-crisis-sensitive-and-equity-focused-approach/



- Stone, D. A. 1988. Policy Paradox: The Art of Political Decision Making. 1st ed. New York: W.W. Norton & Company.
- Stone, D. A. 1989. "Causal Stories and the Formation of Policy Agendas." Political Science Quarterly 104 (2): 281-300. doi:10.2307/2151585.
- Trucano, M. 2016. "SABER-ICT Framework Paper for Policy Analysis: Documenting National Educational Technology Policies around the World and Their Evolution over Time." World Bank Education, Technology & Innovation: SABER-ICT Technical Paper Series 1. Washington, DC: World Bank.
- UNESCO. 2015. "Qingdao Declaration, 2015: Seize Digital Opportunities, Lead Education Transformation" International Conference on ICT and Post-2015 Education: Seize Digital Opportunities, Lead Education Transformation. 2015. Qingdao, China.
- UNESCO. 2020a. "Act Now: Reduce the Impact of COVID-19 on the Cost of Achieving SDG 4" Global education monitoring report: policy paper, 42.
- UNESCO. 2020b. "Impact of COVID-19 on UNESCO's Programme and Activities" UNESCO. Executive Board, 209th, 2020. Paris. https://unesdoc.unesco.org/ark:/48223/pf0000373757?1= null&gueryId=dd11d2c9-33a0-4cc0-ab64-6faf8d8559f3
- UNESCO. 2021. Supporting Learning Recovery One Year into COVID-19: The Global Education Coalition. Paris: UNESCO.
- UNESCO. 2021b. Reimagining Our Futures Together: A New Social Contract for Education. Paris: UNESCO.
- UNESCO, UNICEF, and World Bank. 2020. What Have We Learnt?: Overview of Findings from a Survey of Ministries of Education on National Responses to COVID-19. Paris, New York and Florence, Washington D.C: UNESCO, UNICEF, World Bank, https://data.unicef.org/resources/ national-education-responses-to-covid19/
- UNICEF. 2019. "Every Child Learns UNICEF Education Strategy 2019-2030" https://www. unicef.org/media/60301/file/UNICEF-education-strategy-2019-2030-exec-summary.pdf
- UNICEF. 2020. "Reimagine Education Summary Case for Investment 2020." https://www.unicef. org/documents/reimagine-education-summary-case-investment-2020
- UNICEF. 2021a. "COVID-19 and School Closures: One Year of Education Disruption." https:// data.unicef.org/resources/one-year-of-covid-19-and-school-closures/
- UNICEF. 2021b. "GLOBAL COVID-19 Final Report: March 2021." https://www.unicef.org/ media/96151/file/Corrigendum-UNICEF-Final-2020-Global-Covid-19-Situation-Report-Feb-Dec-2020.pdf
- Verger, A. 2012. "Framing and Selling Global Education Policy: The Promotion of Public private Partnerships for Education in Low-income Contexts." Journal of Education Policy 27 (1): 109-130. doi:10.1080/02680939.2011.623242.
- Vickers, E., and P. Morris. 2022. "Accelerating Hong Kong's Reeducation: 'Mainlandisation', Securitisation and the 2020 National Security Law, Comparative Education."
- Wall Street Journal. 2011. "Pearson Buys U.S. Online School Network" September. 15. https:// www.wsj.com/articles/SB10001424053111903927204576572582659220472
- Williamson, B., R. Eynon, and J. Potter. 2020. "Pandemic Politics, Pedagogies and Practices: Digital Technologies and Distance Education during the Coronavirus Emergency." Learning, Media and Technology 45 (2): 107-114. doi:10.1080/17439884.2020.1761641.
- Williamson, B., and A. Hogan. 2020. Commercialisation and Privatisation In/of Education in the Context of Covid-19. Brussels, Belgium: Education International.
- World Bank. 2020. Realizing the Future of Learning: From Learning Poverty to Learning for Everyone, Everywhere. Washington, D.C: World Bank Group.
- Zancajo, A., A. Verger, and P. Bolea. 2022. "Digitalization and Beyond: The Effects of Covid-19 on Post-pandemic Educational Policy and Delivery." Europe, Policy and Society 41 (1): 111-128. doi:10.1093/polsoc/puab016.