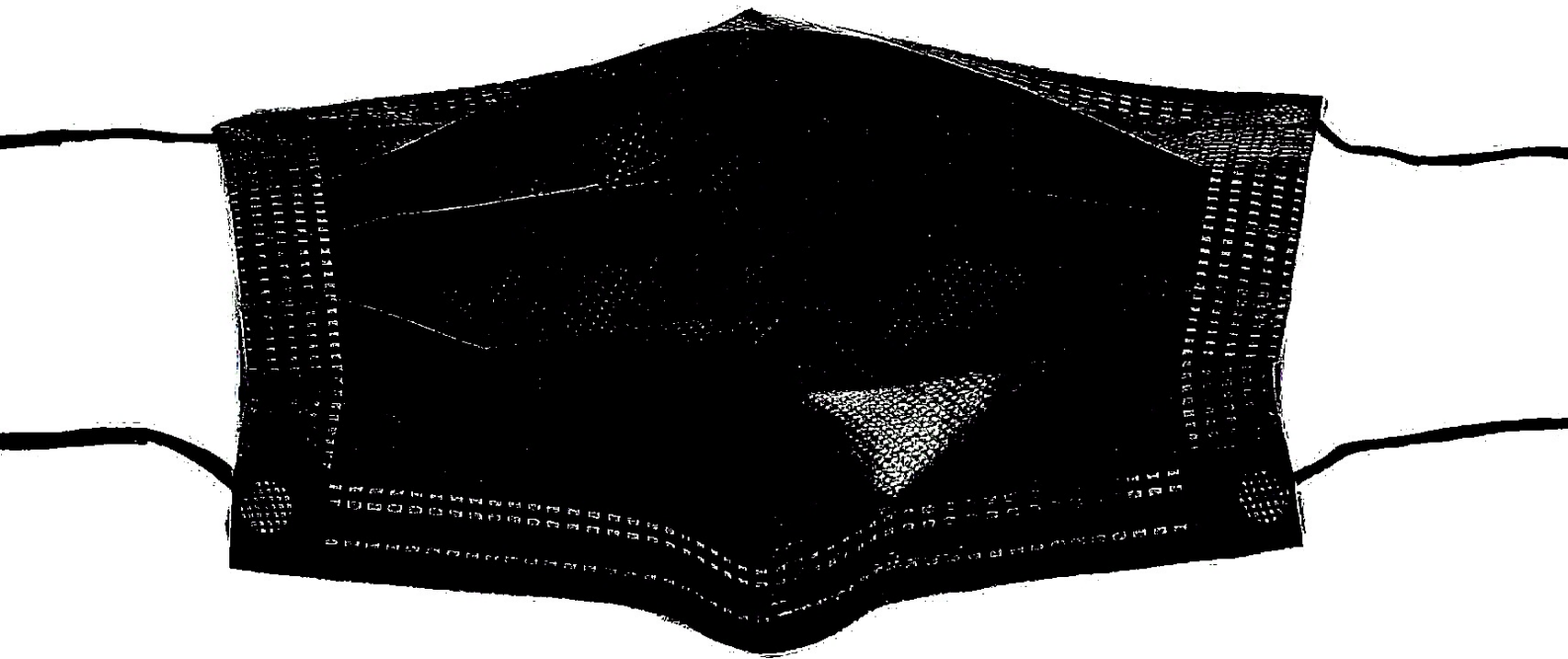


TECHLASH

TECHLASH – issue #01
June 2020 - FREE
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#01



digital education after COVID-19

THIS IS NOT 'BUSINESS-AS-USUAL' OR A 'NEW NORMAL'. COVID-19 HAS THRUST US INTO A PERIOD OF FAST-MOVING DIGITAL REFORM OF PUBLIC EDUCATION ... AND WE NEED TO RESPOND ACCORDINGLY.

editorial/preface

These are difficult times to be making sense of digital education. We write this in June 2020 – a moment when some people are beginning to entertain hopes that we have seen the worst of COVID-19. Of course, with hindsight it might well transpire that we are only a short way into the full pandemic. So far, things have been changing so rapidly that anything that we write runs the risk of appearing hopelessly off-the-pace by the time that it is read.

For the time being, then, it feels unwise to claim to have a clear critical grip on any aspect of society. As Dave Beer (2020) has written recently:

‘Beyond the speed of change and a lack of focus, there is also a sense that the thing I’d normally be analysing - society - will not be the same ... It’s hard to do sociology & social science when you aren’t quite sure what the social is and how it is working’.

Yet regardless of how this current crisis eventually unfolds, We are fairly sure that it makes no sense to carry on critiquing the digitalisation of education in *exactly* the same ways that we were a few months before. Without wishing to descend into hyperbole, it seems sensible to assume that things are *not* going to be the same again.

Of course, all of the broad issues and concerns that were guiding our work prior to COVID-19 remain as important as ever. However, we obviously need to rethink and reframe such matters through the lens of this pandemic and its aftermath.

Judging by the industry gambits and political powerplays that have already taken place around EdTech during these opening months of the pandemic, it seems clear that COVID-19 is going to have a lasting impact on the ways that education and digital technology come together for years to come. Current conversations around remote schooling and online university teaching convey important shifts in tone, pace and intent that need to be factored into any critical discussions of digital education. Despite the prevailing rhetoric from those who stand to gain most from such changes, this is not ‘business-as-usual’ or a ‘new normal’. Instead, we find ourselves thrust into a period of fast-moving digital reform of public education, and we need to work hard to respond accordingly.

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<NOTHING TO SEE HERE>

digital education in the aftermath of COVID-19: critical concerns & hopes

neil selwyn

INTRODUCTION

As is now being observed in various stark ways around the world, this pandemic is bringing many long-simmering political tensions and social struggles to a head. So, for the foreseeable future, discussions of digital technology and education need to be focused firmly on ensuring that the pandemic is *not* used as an excuse to push through further corporate reforms of public education. Instead, those of us involved in the critical study of digital education need to work quickly to develop counter-narratives and alternate agendas to foster hope that this extraordinary event might perhaps act as a catalyst to reimagine a better state of public education for us all. Let's think these two points in a little more detail ...

COVID-19 AS COVER FOR THE CORPORATE REFORM OF EDUCATION

The first few months of the pandemic have seen a range of long-established technological trends, plans and agendas being accelerated

under the guise of being 'emergency short-term fixes', but nevertheless looking set to be more permanent in nature. Beyond education, this logic is evident in the haste with which whole-population surveillance, tracking and tracing apps have been deployed hurriedly without due oversight and regulation. In educational terms, this logic is apparent in the haste with which universities have been coerced by governments to pivot to industry-relevant short courses, merge or even close down altogether.

In terms of digital education, then, there needs to be sustained scrutiny of the emergency actions and logics that are being put into place. In particular, we need to pay close attention to how the global pivot to 'emergency' forms of remote teaching during the first half of 2020 is subsequently being used as justification to radically rethink the future shape and character of education provision. As Frederick Hess (2020) observed in the initial weeks of the lockdown, 'a few education analysts have started to

sound positively giddy about this exciting opportunity to spitball ideas and try out nifty new programs'. Thereafter, EdTech gurus such as Sal Kahn proved remarkably quick to talk of the 'silver lining' of COVID-19. Andrew Cuomo – state governor of New York – channelled this sentiment when arguing in May for a permanent switch-over to sophisticated 'remote learning' across the education system:

'The old model of everybody goes and sits in a classroom and the teacher is in front of that classroom, and teaches that class, and you do that all across the city, all across the state, all these buildings, all these physical classrooms ... why, with all the technology you have? ... It's hard to change the status quo. But you get moments in history where people say, 'OK I'm ready. I'm ready for change. I get it'. I think this is one of those moments.'

Such statements betray serious intent to significantly alter the conditions and character of public schooling through the widescale digitization of education provision. US commentators are rightly horrified by the idea of Eric Schmidt and the Gates Foundation being given the lead to reform New York schools, yet it is understandable that state authorities and city leaders around the world are keen to follow similar courses of action. Switching over to data-driven 'personalised' form of blended education provision promises to be a timely cost-saving measure in the face of the impending global financial meltdown.

Yet the digital education infrastructures that we choose to erect in response the current crisis will come to (re)define public education for decades. As Woodrow Hartzog (2020) has argued with regards to the rapid rush to COVID surveillance and tracking, once any technological infrastructure is established there is an inevitable inertia to later roll it back:

'norms get set and practices and tools become entrenched ... industry and government [rarely] have the resolve and humility to double-back and try a different approach'.

The exact nature of the 'digital solutions' that are going to be pushed onto public schooling over the ensuing months and years remain to be seen. However, these are unlikely to involve bespoke new forms of technology that have been designed carefully and sympathetically to address the social frailties and economic fault lines that the COVID-19 crisis has exposed and exacerbated. Instead, any 'new solutions' are likely to rely heavily on the re-packaging of EdTech products that have long been spruiked - personalised learning systems, learning analytics, online adaptive assessments, online exam proctoring, and the like. As such, COVID-19 is already being used as an opportunity to re-animate ideas and logics of digital education reform that have been long pursued by the likes of Gates, Schmidt, and those who follow in their wake.

So, policymakers and education leaders appear to be setting off down dangerous paths toward realising key concerns that have been continually raised by those of us working in the critical studies of education and technology – not least the restrictions of proprietary platforms, classroom automation, surveillance-led teaching, and the data-mining of lucrative student information.

Concerns here range from straightforward profiteering through to less obvious misappropriations of digital technology in ways that sideline (or overlook completely) structural inequalities. As Kathryn Moeller and Rebecca Tarlau (2020) reason:

‘While reimagining and redistributing educational resources and opportunities is imperative, research shows that philanthropic experts often work to find technical solutions to systemic inequities without addressing their underlying causes. If we are to truly transform our nation’s inequitable educational system, turning to philanthropists with a track record of failing to improve public education is not the answer’.



COVID-19 IS BEING MISUSED TO FORCE RADICAL EDUCATION REFORMS BY THOSE WHO STAND TO PROFIT DIRECTLY FROM THEM

If taken to their logical conclusion, these are shifts that will fundamentally alter the conditions and characteristics of public education – hastening the implicit agenda of corporate education reform that has underpinned much EdTech ‘innovation’ over the past fifteen years or so. Indeed, the corporate and philanthropic actors that are now being called upon to lead the reconfiguration of post-pandemic schooling have long-standing ambitions for the digitally-driven ‘unbundling’ and ‘transformation’ of mass public education systems. Critical education scholars therefore need to be hyper-vigilant of the ways in which COVID-19 is being misused to force radical education reforms by those who stand to profit directly from them.

ESTABLISHING ALTERNATE AGENDAS AND COUNTER-NARRATIVES

Of course, scholarly vigilance and critical awareness is not enough. Pushing back against the COVID-mandated digital dismantling of

established schooling also requires resistant actions. Perhaps the most helpful role that academic researchers can play in supporting such actions is working to establish powerful counter-narratives and alternate sets of discussion points. Let's consider a few lines along which such efforts to change the nature of the conversation might be pursued.

For instance, a strong case can be made that COVID-19 has already done much to discredit the idea of the technological fix – starkly exposing the limitations of Silicon Valley illusions of digital 'innovation'. As I write, the much-hyped rollout of COVID tracing apps are failing spectacularly in comparison to manual tracing techniques. Elsewhere, we have abruptly seen the limitations of AI systems that find themselves lacking the appropriate training data to adapt to these extraordinary times.

In short, it has become clear over the initial months of the pandemic that there is no quick App-based solution to this crisis. Instead, our hopes are pinned on the necessarily slow and methodical route of scientists working to develop a vaccine. As such, this pandemic has already proved to be an object lesson in the limitations of digital technology solutionism when it comes to public health. The parallels with public education need to be stressed repeatedly and forcibly.

Indeed, the COVID-driven pivot to temporary remote home-schooling could be reframed as a moment where a wide range of publics are now well-attuned to the social limitations of educational technologies when used *in situ*. One can now talk with school leaders and policymakers about the 'digital divide' within communities, and there is general agreement (rather than the usual pre-pandemic response of denial or downplaying the inequalities in the assumption that 'we are all online now'). Similarly, one can talk to parents and teachers about the sub-standard nature of platform-based learning, and find large number of people with recent first-hand experience.

In this sense, the immediate aftermath of the emergency turn to remote schooling provides us with critically-engaged publics who are receptive to difficult conversations about EdTech. This moment needs to be seized upon before the memories of the 2020 remote schooling fade away. Conversely, it could also be argued that official educational response to the pandemic saw some precedents being set that we might like to argue are worth fighting to repeat. For example, it was heartening to see governments suddenly subsidising the cost of laptops and Wi-Fi connectivity for disadvantaged families otherwise lacking access. It was also reaffirming to see countries like Australia suddenly suspend the

nationwide standardised NAPLAN testing of children. Actions such as these set a precedent for alternate future policy approaches and agendas. Rather than cow tailing to the corporate reform lobby, a strong case might be made for the continuation of these other ‘new’ logics – i.e. enshrining a commitment to continue to invest in the social safety net and establishing an education infrastructure built around values of care and collective support, rather than relentless assessment and measurement.

CONCLUSIONS

Regardless of how the pandemic unfolds, it is important that such discussions are started and establish new lines of argument and fresh sets of imperatives. Above all, it is important to diversify the voices that are called upon to set these agendas. As Bianca Wylie (2020) wrote in the aftermath of Toronto’s ‘SideWalk Labs’ debacle: ‘technology procurement is thus one of the largest democratic vulnerabilities that exists today’. Above all, then, it is important that we work to ensure that conversations about (post)pandemic education are not be framed solely about technology issues and/or led solely by technology interests. It is important to push the counter-narrative that the re-imagining of public education is not a ‘tech issue’. Instead, these conversations need to be pivoted firmly toward the heart of the matter – i.e. education as a social concern.

In short, critical education scholars have a clear role to play in assisting in efforts to ensure that the conversations that subsequently take place around education and digital technology are radically different than what has been promoted to date. In this sense, we need to ensure that these conversations are led by the interests of education and society – in contrast to the IT industry and philanthropic actors who are currently being called upon (in Governor Cuomo’s words) as ‘experts’ to ‘develop a blueprint to reimagine education in the new normal’. Critical education scholars have raised and explored many lines of reasoning and sense-making over the past 30 years that can feed into the current moment of uncertainty. We should not make the mistake of spectating from the side-lines ■

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three stories about edtech after the corona pandemic

felicitas macgilchrist

INTRODUCTION

'If only schools here were not lagging so far behind other countries, they could have easily moved their teaching to a learning platform during COVID-19!' says an EdTech consultant in Germany.

'Dear students, here's a paper airplane challenge we just developed at a BarCamp – you have a week to do it and send me your photos!' writes a high school teacher.

'How can we design respectful, open and convivial EdTech?' wonders a de-growth activist.

These three comments hint at three different stories that we are telling about EdTech and schooling during (and after) the SARS-CoV-2 pandemic. All three were lurking around before the pandemic, but it looks as if the status of each has changed since the turn to remote schooling started.

#1. 'TRANSLATIONAL EDTECH'

The first story has been heavily critiqued even though it has expanded and become received wisdom for many of the people making decisions about technology and schooling. It's a story about 'tools', about 'catching up', 'modernising' and 'progress'.

During the initial phase of the corona pandemic, opinion pieces and EdTech magazines declared that if only schools had been better equipped - with better infrastructure, digitally competent teachers and more practical experience with EdTech - 'home schooling' would have been a walk in the park.

**THE FIRST STORY IS
ABOUT 'TOOLS',
ABOUT 'CATCHING-
UP', 'MODERNISING'
AND 'PROGRESS'**

To support schools (and clearly also as a marketing strategy) many providers quickly offered their learning software and learning environments free of charge for a few months. EdTech providers prioritised their ‘individualised’, ‘fast’, ‘intuitive’ and ‘easy to use’ solutions, and stressed an issue that is very important across Germany: that their product is ‘secure’ and protects student data. And indeed, with thousands of new users practically overnight, many providers had to upgrade their servers, and security gaps subsequently became clear (Adamek & Opalka 2020).

The focus in this narrative is on tools that translate familiar forms of face-to-face teaching into remote learning. Examples in news stories, social media and customer communication included video conferencing (as a replacement for class discussion), learning platforms (as a replacement for bookshelves and binders) and online quizzes (as a replacement for worksheets).

So, if software is always oriented to solving a ‘problem’, which problem is being solved here? Before the corona pandemic, Germany's poor ranking in international comparative studies like ICILS was seen as a particularly urgent problem. Students had to be made digitally competent. Then, during the pandemic, the urgent problem for these observers shifted to become how to maintain teaching in a form that is as familiar as possible.

This story is widespread in legacy media and among policymakers. It is strongly promoted by the companies that profit from it. It frames EdTech as an efficient, instrumental solution. It assumes that technology is transparent: in this story, tech won't actually change how teachers teach or learners learn or people interact. In a circular argument, the core added value of using new technology is that we will be using new technology. This is a benefit in itself, simply because it's cool to use tech. And (echoing classic progress narratives of the nineteenth century) using new tech is modern, it's the future ... and anything else is backward.

#2. ‘RELATIONAL EDTECH’

A second story focuses on relationships, solidarity and creative communication. At the beginning of 2020, I was still describing a version of this story as a marginal narrative. This story about EdTech is about social relations and creative ideas. This story prioritises the specific ‘affordances’ of EdTech, i.e. what this hard- and software can do, what it enables but also what it forecloses.

A SECOND STORY FOCUSES ON RELATIONSHIPS, SOLIDARITY AND CREATIVE COMMUNICATIONS

Yet, from the outset of the corona pandemic, this second story was suddenly not at all marginal anymore. It became far more prominent in social media. It is a story of collaboration and social interaction while social distancing. On Twitter, teachers exchanged ideas for teaching, tools for communication and wellbeing and new kinds of learning activities. In Germany, education hashtags such as #twlz, #twitterlehrerzimmer and #edupnx became widely shared.

Some of these ideas involve commercial software, but many do not. A popular ‘airplane challenge’ involves making a paper plane, styling it, launching it, recording its flight, doing the math on the flight curve, and sharing the video. It takes tech to record and share the flight, but not the legacy EdTech of the first story. There were ‘un-courses’ and BarCamps using open access tools and open educational resources. Teachers also shared worries and fears, and their joy when students shared positive feedback.

This story tells us about teachers spending weekends together during the first weeks of school closures, working out how they could use a handful of carefully curated tools to keep in touch with their students and to keep them engaged in learning. This period was also characterised by solidarity with families: schools trying to reach families, including those without all the high-tech gadgets at home. Video conferences, messengers, and email were in heavy

use. But some teachers were also meeting disadvantaged students face-to-face once a week to check in with them. They would, for instance, sit six feet apart on a park bench. The primary educational technology was a pack of printed papers with the week’s tasks.

The social goals are clear in all these instances: finding creative ways to enable social interaction, to maintain and strengthen social relations. This story tells us about the relationality of technology; the sociotechnical relations that are enacted—and changed—when we use EdTech. If software solves a problem, the problem here is how to sustain the social dimension of school life. Priority is given to solidarity, to reimagining communication and to creative inventiveness.

What do those of us working on critical studies of EdTech do when the central story shifts so palpably away from the instrumentalist progress-efficiency narrative that has dominated for years? First, we can highlight these alternative narratives, especially as they become less ‘alternative’. We give them a name, reflect on what they are doing. But second, perhaps we need to remember not to be seduced by social media narratives. Legacy media retain a strong influence on decision-makers. And third, we can look at the blind spots of these stories, no matter how much they enable spaces of possibility that were previously considered closed off.

#3. 'CONVIVIAL EDTECH'

A third story points to what we overlook when we celebrate communication and solidarity. It is certainly still a marginal story, although there is emerging interest in what it can look like in practice. This third story emerges from social movements that are sharply critical of global inequality and injustice, including the climate crisis and closed borders. But it is hopeful. It explores the role of EdTech in fundamentally transforming social, cultural, ecological and economic hierarchies.

This story finds new concepts to imagine different futures. Several of these can provoke us to think otherwise about education and technology, e.g., Kate Raworth's (2017) 'doughnut economics', Lizzie O'Shea's (2019) 'future histories', Andrea Vetter's (2018) 'convivial technology', or Dori Tunstall's (2019) 'respectful design'.

THE THIRD STORY IMAGINES A FUTURE WITH CONVIVIAL AND RESPECTFUL EDTECH

If we begin to talk about convivial EdTech, we pick up the idea of conviviality, of 'living together well' and place this idea at the centre of educational processes. Conviviality emphasizes that EdTech is always embedded in socio-technical-ecological networks and explores what this means for us in our daily educational lives. This story reflects on how new technology goes hand-in-hand with changes in our social relationships, asking us what makes us feel good (perhaps when we maintain friendships during a lockdown) or what makes us feel bad (perhaps when we experience digital exhaustion after the 26th video conference in a week). And this story relentlessly reminds us (again and again, even though we should know by now) that EdTech requires global resource chains of conflict minerals, hazardous factories, child labour and 'digital' waste.

'Respectful design' emphasizes the possibilities for designers to enact values for design that contest patriarchal, racist, colonial, capitalist structures, and that instead address the most vulnerable or most marginalised student-users. It explores how to design EdTech with empathic methodologies that value inclusivity, people's ways of knowing and cultural, social, and environmental justice.

**Respectful
Design**

The logo for OCAD University, featuring the letters 'O', 'C', 'A', and 'D' in a grid, with 'OCAD UNIVERSITY' written above it.

‘Convivial EdTech’ and ‘respectful design’ are critically utopian ways of contesting what is often seen as the corporate takeover of educational policy and practice through technology. Instead of wondering whether Zoom and Skype should become public utilities, as some observers have (Ocampo 2020), this story wonders instead why public entities don’t invest heavily in using open source alternatives like Jitsi that are already available to power a public utility.

This story is also unfolding under-the-radar in schools that are able to think carefully about the commons. In one school that trialled an open source system (Linux), teachers told us of their experiences of similar successes and challenges as teachers at schools that have introduced commercial systems. Yet there was one major difference. Using Linux, these teachers said, gave them the feeling that they were doing pedagogical work with their choice of software. By introducing an alternative operating system, students would experience at least two systems and could make their own educated choices later. These teachers were pleased that they were not allowing companies direct access to their school, minimising corporate influence in school, helping to reduce brand dependencies, and that they did not allow corporations to generate or access student data.

This story usually remains in the staff room. It is not something the media are reporting, it is not something that

the school trumpets. The problem being solved in this story is how to keep schools within the commons, how to expand the commons to span the globe. These apparently mundane practices are profoundly political, and it’s crucial that critical EdTech scholars explore these lines of flight, alongside analysis of the powerful corporate projects to influence educational policy and practice.

CONCLUDING THOUGHTS

I want to end with a vignette which goes beyond the first three stories. Jane (pseudonym) has had trouble getting her children to primary school for years. They miss a lot of school, are often late, and when they are in class, they are not engaged in learning. The class teacher, Stacey, has built up a supportive relationship with Jane, but it hadn’t helped before the pandemic. Jane didn’t feel confident interacting with other parents, she felt alienated from formal education, and struggled with institutional hierarchies and timekeeping.

When schools closed in March 2020, Stacey uploaded tasks to the school’s learning platform for parents to download. She let parents know they could phone her anytime. Jane called her frequently, to figure out how to help her kids. She could finally see what their learning looked like. She was in the safety of her own home. And they could get their work done at their own pace, and without

the shame of arriving late. It wasn't all Zen-like learning, but during the pandemic, these children were finally positively engaged in learning.

This story contests one view of education and technology that has been widespread since the beginning of the containment measures: i.e. that inequality is being exacerbated because of the digital divide. Some kids don't have technology, and 'are thus' excluded from learning. This is undoubtedly true in many cases. But this story shows the exclusion that happens while children are apparently included, and the inclusion that happens while they are apparently excluded.

So, what does this all mean for the future of education and technology? That is still unclear. What is clear is that we are never only talking about education and technology, we are talking about education and socio-technology. What is also clear is that we need to look more carefully at how local experiences interrupt expectations of how education and technology (and inequality) are linked ■

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new pandemic edtech power networks

ben williamson

INTRODUCTION

Mass closures of schools and universities plus rapid switches to remote online teaching and learning around the world have empowered technology vendors and promoters to position themselves as frontline emergency response providers during the current coronavirus outbreak. In the early stages of the crisis, individual organizations sought to offer up novel solutions and potentially gain advantage from the new markets stimulated by the shuttering of schools. Very rapidly, however, new coalitions, collaborations and alliances have formed around more substantial shared objectives to ‘solve’ the global disruption of education.

Powerful networks, consisting of big tech companies such as Google, Microsoft and Facebook, international organizations including the OECD and UNESCO, as well as a global education industry of edu-businesses, consultancies, investors and technology providers, are coming together to define how education systems should respond to the crisis. But their objectives do

not just focus on the short term. These pandemic power networks are developing new long-term policy agendas for how education systems globally should be organized long after the emergency ends.

The aim of this piece is to begin mapping out the actors that have emerged as influential organizations in relation to education during the pandemic, focusing on the intersections of education technologies and education policies. By mapping and documenting some of their activities, we can begin to understand how emerging networks of organizations are both seeking to solve the global disruption of education, and pave the way for longer-term transformations to education systems, institutions and practices. Much more sustained analytical work remains to be done—this is just a descriptive, first-draft sketch of current emergency policy developments that are still in motion.

PANDEMIC POLICY MOBILITY

It is now clear that the dominant education policy preoccupation

globally is how to deliver schooling without schools and degrees without campuses. The primary policy solution has been identified as digital technology and online 'remote learning'. Despite considerable debate about the difference between well-designed online learning and emergency remote teaching, consensus on digitally-mediated distance education has become a remarkable instance of policy mobility.

According to policy researchers, rather than solely emanating from central authorities, many contemporary policy processes are now distributed across different sectors, giving non-governmental organizations, businesses and other experts much more influence in the direction of policy, the dissemination of policy ideas, the formulation of policy advice, and the enactment of policies. A single policy may be the result of myriad interests and concerns being slowly translated and aligned into shared objectives. Policies also travel across borders, are borrowed, shared, adapted and recontextualized, and are fashioned and refashioned through the involvement of diverse actors from a range of sectors.

The mobile, networked policymaking condition has proven ideal to the expansion of educational technologies and media. EdTech is increasingly present within formal education policies as a result of the significant effort of advocacy networks, think tanks, consultancies,

campaign coalitions, and business lobbying. Policy discourses and agendas around digital education, 'personalized learning' and 'AI in education' have travelled at speed around the world, lubricated by network relations. These EdTech power networks are actively intervening in education systems in ways that suggest new forms of power and influence over education and its future.

EdTech has long been presented as a powerfully 'disruptive' force in education. During the ongoing coronavirus crisis, new pandemic power networks have begun to coalesce around claims that EdTech is not just disruptive, but in fact palliative. One example is a collaborative EdTech network facilitated by the UK venture investment company Emerge Education. Badged as an 'EdTech industry collaboration to help schools and colleges deal with CV19 and the need for home learning,' the online summit featured a diverse cross-sector mix of US-based tech businesses (Adobe, Amazon Web Services, Google, Microsoft), alongside UK-based edu-businesses and their supporters. Its key aim was to help school leaders and teachers learn how 'curated EdTech resources (both online and offline) are available to set up effective home-schooling.'

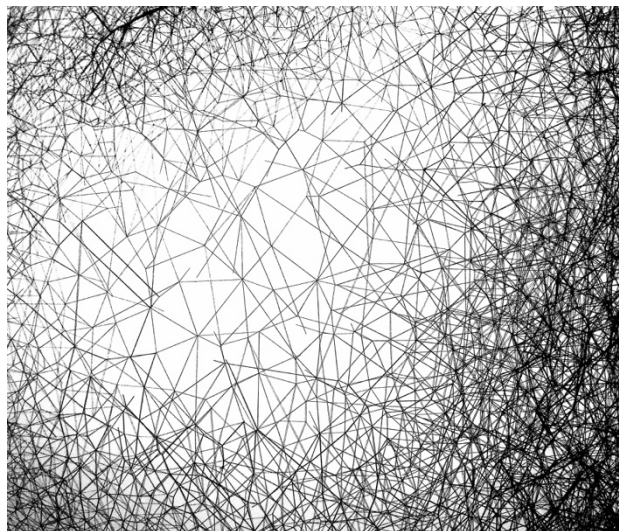
The claims made through such networks about the palliative benefits of digital technologies and online teaching for ailing education systems are not confined to the period of the

health emergency itself. Instead, many of these organizations are seizing the opportunity to project their longer-term objectives for large-scale educational adaptation and change, forming into pandemic power networks to achieve their transformative objectives.

CORONAVIRUS COALITION- MAKING

The United Nations Educational, Scientific and Cultural Organization (UNESCO) has positioned itself as the world authority on disruption to education caused by the global coronavirus outbreak. With approximately 1.5 billion students affected by school and university closures in 165 countries (87% of the global student population), UNESCO has taken the lead both in monitoring national responses and in formulating international responses to the educational crisis. On 24 March it released a 'snapshot of policy measures' as part of its Global Education Monitoring project, reporting that 'all countries are introducing or scaling up existing distance education modalities based on different mixes of technology.' Most countries, it reported, were

**NETWORKS HAVE
BEGUN TO COALESCE
AROUND CLAIMS
THAT EDTECH IS NOT
JUST DISRUPTIVE, BUT
IN FACT PALLIATIVE**



using the internet and providing online platforms to deliver live lessons or record massive open online course (MOOC) styled provision for continued learning, encouraging teachers and school administrators to use existing apps to support communication with learners and parents, or using TV and other media to deliver educational content. However, it also noted major concerns about equity in access to ICT-based learning.

Two days later, on 26 March, UNESCO launched its Global Education Coalition as a 'multi-sector partnership to provide appropriate distance education for all learners', pushing the announcement across social media with the hashtag #LearningNeverStops and endorsement from Angelina Jolie in her role as a UN Special Envoy. Specifically, the coalition aims to help countries mobilize resources and implement 'innovative and context-appropriate solutions to provide education remotely, leveraging hi-tech, low-tech and no-tech

approaches', identify 'equitable solutions and universal access', ensure 'coordinated responses and avoid overlapping efforts', and facilitate 'the return of students to school when they reopen to avoid an upsurge in dropout rates.' These are of course admirable and ambitious aims.

One additional objective stated on the coalition homepage, however, is to look beyond the context of the current emergency to longer-term transformations to education:

Investment in remote learning should both mitigate the immediate disruption caused by COVID-19 and establish approaches to develop more open and flexible education systems for the future.

In order to achieve both its immediate palliative aim and its longer-term objective of 'investment' in 'education systems for the future,' the coalition has enrolled partners from across sectors, including international organizations, civil society and private sector companies.

EDTECH EXPERIMENTS

In the category of international organizations and multilateral partners are the likes of Unicef, the WHO, World Bank, Global Partnership for Education, and the OECD. Two of these partners have already made significant effort to promote transformative agendas for education during the coronavirus outbreak. The World Bank, for

example, launched a Strategic Impact Evaluation Fund on 23 March, part of its funding program matching 'scientifically sound research methods with policy challenges,' with proposals invited for a fast-tracked competition intended:

to generate experimental and quasi-experimental evidence that would be immediately useful for countries' education systems as they deal with the Covid-19 pandemic.

In addition to the fund, the World Bank is also cataloguing best practices worldwide to support remote education through educational technologies, and working closely with national government ministries to develop their capacity:

The World Bank actively working with ministries of education in dozens of countries in support of their efforts to utilize educational technologies of all sorts to provide remote learning opportunities for students while schools are closed as a result of the COVID-19 pandemic, and is in active dialogue with dozens more.

The World Bank even talks of a long-term 'crisis of education' that pre-dates coronavirus, tapping into longstanding policy discourses of education systems being broken and in need of transformation that are also shared among many education-focused agencies, philanthropies and businesses.

The OECD, meanwhile, published a 23 March briefing with recommended policy proposals for national governments to tackle school

closures, as part of a package of policy proposals covering many governmental sectors. 'The #coronavirus crisis is a stress test for education systems around the world,' the OECD Education directorate tweeted to promote the education proposals. 'But it is an opportunity to embrace digital learning and online collaboration.' The education briefing itself stated:

Every week of school closure will imply a massive loss in the development of human capital with significant long-term economic and social implications.

For the OECD, coronavirus is not just a human health crisis but a crisis of human capital stagnation. In order to mitigate this disruption to human capital development, the OECD recommended countries to use existing online infrastructure in the short-term for online distance courses wherever possible, and to encourage education technology companies to make their resources freely available. But the briefing concluded with a section on 'long-term opportunities'.

The current wave of school closures offers an opportunity for experimentation and for envisioning new models of education and new ways of using the face-to-face learning time.

Such 'experimentation' and 'envisioning' should, suggested the OECD, 'Explore different time and schooling models,' such as 'how students can learn in different places and at different times' using 'digital learning solutions' and 'provide students with opportunities to have

more agency by being given more autonomy.' It should also 'Empower teachers to make the most of digital advances,' to 'test out different digital learning solutions, and understand how technology can be used to foster deeper student learning,' to 'think creatively about their role as facilitators of student learning, and how technology can support them in doing so, and how they can combine their expertise as a profession.'

In an article on 'the world's biggest educational technology (EdTech) experiment in history', the OECD's education director Andreas Schleicher claimed 'It's a great moment':

All the red tape that keeps things away is gone and people are looking for solutions that in the past they did not want to see. ... Real change takes place in deep crisis. You will not stop the momentum that will build.

Schleicher emphasized how the pandemic response would cut the 'red tape' from personalized learning and other new digital formats enabling students to take individual ownership of their learning.

These are familiar arguments from the OECD about the future of education, translated in a new context. It is now treating the global pandemic as an experimental opportunity and a 'great moment' to catalyse and sustain the long-term digital transformations to education systems that will enable human capital development for an

increasingly digitalized economy. In these ways, the OECD is seeking to lubricate the links between learning and earning, as part of its economization of education, and to guide national education leaders to utilize digital technologies to ensure improved employability prospects for students.

As Schleicher argued in his visionary book on building ‘21st century education systems,’ the OECD is shifting its emphasis from ‘literacy and numeracy skills for employment, towards empowering all citizens with the cognitive, social and emotional capabilities and values to contribute to the success of tomorrow’s world.’

EMBEDDING ‘BIG TECH’ IN EDUCATION

Besides the multilateral organizations, the UNESCO coalition has also partnered with the private sector and with non-profit education organizations. These include Google,



THE OECD IS SEEKING TO LUBRICATE THE LINKS BETWEEN LEARNING AND EARNING

Microsoft, and Facebook from the US tech sector, the international consultancy KPMG, as well as Weidong (cloud-based education services), Coursera (MOOC provider), Zoom (videoconferencing platform), Khan Academy (online learning), Moodle (learning management system) and code.org (learn to code coordinator).

While it is not explicitly clear from the available coalition documents how these partners will each be involved, a key action of the coalition is to ‘match on-the-ground needs with local and global solutions’ and ‘provide distance education, leveraging hi-tech, low-tech and no-tech approaches.’ As such, it would appear that big tech companies are to become officially-approved providers of ‘global solutions’ to schooling closures and the challenges of distance education.

While this switch to private sector and non-profit tech solutions remains completely understandable in the current context, its future implications for education systems around the world are far-reaching. These tech organizations share the ambition of the World Bank and OECD to embed digital technologies in education at very large scale, not just to assist in human capital development as the OECD explicitly

states it, but in some cases to generate commercial advantage and market share too.

Some of these technology companies and organizations do not have unblemished records. For example, controversy has emerged over data collection and privacy of the videoconferencing platform Zoom, which was offered up to schools for free very quickly as lockdowns set in. Reports of racist ‘zoombombing’ of online lectures have raised new concerns over its security. Facebook has also been the subject of extensive criticism, and has little record of involvement in education; Zuckerberg’s vehicle for educational influence is through the Chan Zuckerberg Initiative, which has become one of the most influential supporters of data-driven personalized learning software in the US. Google and Microsoft, of course, have longstanding programs in education, with Microsoft Teams and Google Classroom experiencing a surge of customers. Teams has become a key collaboration platform for university staff during lockdown, and Google Classroom, which passed the 50 million download mark in late March, used extensively by schoolteachers around the world to set remote learning tasks.

Google had already launched a new service called Teach from Home in partnership with UNESCO’s Institute for Information Technologies in Education, as a ‘temporary hub of information and tools to help teachers during the coronavirus (COVID-19) crisis’. It also provides

resources for distance education through Google’s dedicated COVID19 Information and Resources site. Teach from Home actually consists of the standard Google G Suite of apps for education, including Classroom, Drive, Docs, Hangouts, Groups and so on. ‘To give any of the suggestions a try, sign in with your G Suite for Education account,’ the Teach from Home site states. ‘If you don’t have one already, your school can sign up here.’

Google also launched Learn@Home through YouTube as a resource for families with children during school closures, with multiple channels of content provided by selected education partners. One of its main features is a daily ‘Homeroom’ video with Salman Khan of Khan Academy, another UNESCO coalition partner.

Salman Khan is also the author of a book popularizing the argument that conventional schooling is ‘broken’ and can be fixed through a ‘tech-friendly philosophy of education’. In Khan’s future vision of public education, the borders between schooling and home-schooling become porous, as ‘flipped classrooms’ joined together by intelligent networked technology:

Khan Academy is the software-based embryo of the one world classroom. It’s not the fully functioning system, by itself. Khan Academy is more like a programming brain that the rest of the nervous system (different brick-and-mortar schools and home-schools) can access for the same unified participation in a free global education.

For Khan, as for many other Silicon Valley-based educational entrepreneurs, the software platform and the social media model is itself a template for school reform, where technology-enhanced teaching and learning appears to promise ‘an affordable and equitable educational future’ for all students. Khan Academy, Google, YouTube, Apple and Zoom are also all partners in another US-based EdTech network, Wide Open Schools, established by Common Sense Media and powered by Salesforce to provide ‘a free collection of the best online learning experiences for kids.’ These organizations are forming into multiple network relations and formations to promote the kind of ‘flipped’ educational arrangements that tech organizations were already pursuing long before the COVID-19 outbreak, and which they aim to sustain after it.

The technology companies in these networks are also notoriously data hungry. Key figures such as Mark Zuckerberg of Facebook, Eric Schmidt formerly of Google, and Bill Gates of Microsoft are highly influential advocates of personalized education based on data and learning analytics. They see data as a key source of educational improvement, and promote technologies that can automate its analysis and provide real-time feedback to teachers or adaptive support to students. The involvement of these data-driven businesses in the UNESCO global coalition, and the rushed adoption of their platforms at scale, will alarm data

protection and privacy campaigners concerned about commercial exploitation of student data, normalization of student surveillance, adoption of data processing technologies without full vetting procedures, or their imposition without full informed consent.

In the health domain, big tech companies have already signed agreements with governments to help solve the pandemic. Google, Microsoft, Palantir and Amazon are partners in the UK government’s efforts to gather real-time data on the virus, while Google is also gathering mass health data in exchange for coronavirus testing in the US:

Google’s ability to, in essence, force users to consent to data collection may become a more common tactic for companies and governments as the coronavirus rolls on, in their ongoing scramble to use technology to more effectively (and, most likely, profitably) stop the pandemic.

Similarly, within education, data-gathering organizations such as Google have now become virtually infrastructural to remote forms of education, if not to stop the pandemic then to mitigate its effects on many millions of students.

While UNESCO’s intentions are clearly admirable and necessary, the Global Education Coalition has empowered commercial technology actors and the global education industry to become a global infrastructure for education during and after the coronavirus outbreak too. Whether their services are

desirable or not in the current context or beyond, clearly this coalition is enabling private tech businesses to expand their reach and influence in public education.

GLOBAL EDUCATION FOR THE FUTURE

The new pandemic EdTech power network emerging through UNESCO's Global Education Coalition is seeking to fulfil the important requirement for continuity of education for hundreds of millions of students worldwide. Many of its aims and its partners are clearly involved out of strong moral commitment. Not all the partners may always share the same objectives, but have, under extraordinary conditions, translated their aims into a shared policy and technology agenda that may lead to long-term consequences. The multilateral and tech sector partners of the coalition are already pushing for long-term changes to education systems that will:

- Emphasize digital technologies as a solution to a perceived 'crisis' of education that pre-dates coronavirus
- Embed digital technologies as long-term infrastructures of teaching, learning and assessment
- Empower private sector technology companies as key providers of educational infrastructure, platforms, apps, content and other services

- Further decentralize education systems into connected networks where learning can be conducted across homes, schools and other settings
- Enhance data collection and expand use of data analytics, personalized learning software and AI in education
- Focus on human capital development for the digital economy, and on lubricating learning-to-earning pipelines

Very similar aims are shared by other networks, such as the Emerge EdTech industry collaboration and the Wide Open Schools partnership. These power networks are not so much staging a private 'takeover' of education, but together they are seeking to build a private infrastructure on which public education will depend. These new power networks are also seeking to demonstrate the agility of the technology sector and the capacity of technology itself to solve complex policy problems. They are aiming to make digital technologies perform roles as policy machinery, able to

THESE EDTECH COALITIONS ARE ALREADY PUSHING FOR LONG-TERM CHANGES TO EDUCATION SYSTEMS

enact significant changes on education systems at short notice.

These are of course not new aims. Multilateral organizations and technology companies have been pursuing them for years. But the UNESCO coalition has brought these organizations and their aspirations into closer contact and alignment with current emergency policy agendas. New network relations are being formed to drive the use of digital technologies to achieve remote education for all in ways that, in the short term, are intended to address deep inequalities in access to education during the coronavirus outbreak, but that also raise the prospect of profound long-term alternations to systems of public education.

These changes are happening fast during the emergency and are occurring almost without contest, despite years of critical studies of the influence of international organizations such as OECD and World Bank, commercial business involvement in public education, and

concerns about the impact of the global education industry:

‘The shift in authority from the state to private actors might make sense on efficiency grounds, but also entails the undermining of democratic control of public education. Moreover, the professional autonomy and rights of teachers, as well as the local control of communities over their schools, may be undercut by the shift in authority to private, corporate, and global actors. Similarly, it is reasonable to question whether the shift in accountability structures away from democratic modes to corporate/consumer arrangements reshapes the orientation of education as a public good’ (Verger 2016)

These remain critical issues as new pandemic EdTech power networks plan to embed themselves in public education systems long past the public health crisis itself ■

REFERENCE

Verger, A. (2016) *The rise of the global education industry: some concepts, facts and figures*. Education International, March 14th

<NOTHING TO SEE HERE>

