

A. Document 1

After Covid, will digital learning be the new normal?

Nic Fleming, *The New York Times*
21 January 2021

For some, the current global edtech boom is long overdue. Andreas Schleicher, head of education at the Organisation for Economic Co-operation and Development (OECD), has described the pandemic as creating “a great moment” for learning. In May, New York governor Andrew Cuomo publicly questioned why physical classrooms still exist at all, as he announced that former Google CEO Eric Schmidt and Bill Gates would help rethink education in the state.

Sceptics, however, warn that a “digital divide” further widens existing attainment gaps and inequalities faced by disadvantaged children. Others say schools are ill-equipped to protect their pupils’ data, and that the growing role of commercial interests both within state education and through a booming direct-to-consumer edtech market amounts to privatisation by stealth.

At the end of March, with such short notice of the shutdown, most UK schools turned to their existing digital tools to help their pupils continue learning. For some this meant simply uploading links to worksheets to school websites, while others gave live lessons via video conferencing. [...]

Critics like the writer Naomi Klein say the tech giants were quick to see Covid-19 as an opportunity to accelerate their ambitions in education. In June, for example, Microsoft published a position paper called Education Reimagined. It starts: “The fallout from Covid-19, continuing advances in digital technology, and intensifying pent-up demand for student-centred learning have combined to present an unprecedented opportunity to transform education across whole systems.”

But will schools continue their digitally enhanced approach, post-pandemic? Investors certainly think so. Global investment of venture capital in edtech more than doubled from \$7bn in 2019 to a record \$16.1bn in 2020, according to market intelligence consultancy HolonIQ.

Others too believe the shift will be permanent. “Covid has given an impetus to schools to adopt, roll out and use more of the functionality of edtech tools,” says Hannah Owen, of the Nesta innovation foundation. “It’s likely, and optimal, that we’ll move to blended models, where remote and digital platforms support in-person classroom teaching, and contribute to minimising teacher workload.”

[...Still,] privacy campaigners are concerned that teachers, never mind parents and children, are unable to keep track of what edtech companies are doing with pupil data. When schools

sign the G Suite for Education Agreement, for example, they agree Google makes “commercially reasonable changes” to their terms “from time to time”.

“The terms and conditions for many of these products are pages long, hard to follow, change frequently, and schools don't send them to parents anyway,” says Jen Persson, of the campaign group Defend Digital Me. “So it's very hard to understand how Google ~~or~~ anyone else processes a child's data.”

In September, the Washington-based International Digital Accountability Council reported that 79 of 123 edtech apps it examined shared user data with third parties. This could include names, email addresses, location data and device IDs. It found, for example, that the popular language learning app Duolingo was sharing user IDs with outside parties including Facebook.

“Once schools become dependent on the tech giants' systems for teaching in class, homework, management and communications, and once a certain threshold is reached in the number of schools they operate in, then the state delivery of education becomes entirely dependent on private companies,” says Persson.

Meanwhile, there has been a huge growth in the direct-to-consumer digital education market during the pandemic, highlighted in “Commercialisation and privatisation in/of education in the context of Covid-19”, a report co-authored by Williamson and published by the international teaching union umbrella organisation Education International in July.

[...] Those voicing concerns stress they are not against digital tools per se. Rather they question the growing role of those with financial interests in edtech in determining how they are used and in shaping the way schools are run. “Big-tech billionaires have an oversized influence in shaping education policy,” says Watters. “Some of these companies pay very, very low taxes, and their responsibilities are to start contributing properly in taxes, not to provide free Chromebooks. We need schools to be more about what the public wants and not what edtech companies want them to look like.”

A. Document 2

How the pandemic is reshaping education

Donna St. George, Valerie Strauss, Laura Meckler, Joe Heim and Hannah Natanson, *The Washington Post*

15 March 2021

The coronavirus pandemic upended almost every aspect of school at once. It was not just the move from classrooms to computer screens. It tested basic ideas about instruction, attendance, testing, funding, the role of technology and the human connections that hold it all together. A year later, a rethinking is underway, with a growing sense that some changes may last. [...]

The pandemic pointed anew to glaring inequities of race, disability and income. Learning loss is getting new attention. Schools with poor ventilation systems are being slotted for upgrades. Teachers who made it through a crash course in teaching virtually are finding lessons that endure. After a year when some systems did nothing but school by computer screen, it has become clear that learning virtually has a place in the nation's schools, if simply as an option.

"It's like a genie that is out of the bottle, and I don't think you can get it back in," said Paul Reville, former Massachusetts secretary of education and founding director of Harvard University's Education Redesign Lab at the Graduate School of Education. "In many respects, this is overdue."

Few suggest that remote learning is for everyone. The pandemic showed, unmistakably, that most students learn best in person — in a three-dimensional world, led by a teacher, surrounded by classmates and activities.

But school systems across the country are looking at remote learning as a way to meet diverse needs — for teenagers who have jobs, children with certain medical conditions, or kids who prefer learning virtually. It has also emerged as a way to expand access to less-common courses. If one high school offers a class in Portuguese, students at another school could join it remotely. [...]

In the Washington region, suburban Montgomery County is exploring the creation of a virtual academy for full-time online instruction. Parents have advocated for a program for some time, said Gboyinde Onijala, a spokeswoman. "The pandemic has helped us see that it is possible and can be done well," she said.

A study by the Rand Corp., a nonprofit research organization, found about 2 in 10 school systems were adopting virtual schools, or planning or considering the idea. It was the

innovative practice that the greatest number of district leaders surveyed said would outlast the pandemic. Not everyone imagines the same path forward.

“Remote learning is a supplement, not a substitute, for in-school instruction,” said Randi Weingarten, president of the American Federation of Teachers, emphasizing that classroom learning is best for most students and that remote school can mean intense isolation. “Staring at a screen all day is not optimal,” Weingarten said. “Zoom fatigue is real.”

The quality of remote learning varied widely among school districts, with parents complaining about the lack of live instruction and individual attention as well as technical difficulties. Even many families who want remote learning to continue want it improved.

Remote learning has also meant a spike in failing grades for the most vulnerable students in some areas, including English language learners. And across the country an unprecedented number of students have gone off the radar even as schools try to track them down.

Kevin Dougherty, a Laytonsville, Md., parent, said that while remote education has worked for some families, most kids have struggled — and the toll on mental health and social well-being is hard to ignore. Any program, he said, should be operated by the state, with a dedicated budget so “the needs of virtual learning don’t interfere with in-person learning, and vice versa.”

Katie McIntyre, a mother of two in Damascus, Md., said that for her family, virtual classes were “wonderful experiences” — especially for her 10-year-old daughter who has autism and is gifted. Teachers have gone above and beyond. “If I had any opportunity to do this again, I would,” she said.

A. Document 3

A better way to make sense of pandemic 'learning loss'

Valerie Strauss, *The Washington Post*

25 March 2021

We have all experienced loss during the pandemic. We have lost loved ones and we have lost many aspects of our lives that we thought we could rely on. As students return to classrooms, it is not surprising to hear policymakers, education leaders and parents raise concerns about "learning loss," of students falling behind because of the disruptions to their schooling caused by the pandemic.

There have certainly been losses of school learning for too many students during the pandemic. However, there have also been tremendous gains that educators may not have expected, learning that may be hard to measure with tests.

Recently, school leaders from across the country have discussed proposals that teachers focus only on the reading and mathematics skills that are central to high stakes standardized testing in the coming year, to the exclusion of the arts, science and social studies. We are concerned about these proposals for several reasons.

We argue that learning loss is a faulty way to diagnose the challenges faced by children and youth as a result of the pandemic. Of course, many students have been disconnected from school learning, particularly those children who have not had consistent access to the Internet and places where they can focus on learning at home. We also know that far too many students have suffered from isolation, making it harder to focus on traditional school tasks.

At the same time, during the pandemic, many children and youths have made sense of these challenges by creating and sharing videos, music and poetry to express themselves and connect across virtual spaces. With their families, acting as scientists, they have investigated the ways covid-19 spreads and how to protect their mental and physical well-being. As historians, they have studied our nation's past and present, organizing responses and protesting racial injustice in the streets. They have creatively used materials to construct new worlds and ideas.

Although this knowledge is not likely to be captured by standardized tests, many young people have not lost learning. Instead, they have been figuring out new ways to investigate and connect with one another and with adults in a time of upheaval and uncertainty. Instead of focusing on loss, what happens if we begin by asking what young people and their teachers have learned in the past year?

Educators might first center their attention on the importance of connections. When school went remote last March, teachers and students struggled to stay connected to each other. Over

time, as students and teachers learned to navigate the new digital world of schooling, they figured out new ways to connect. Many teachers called students' homes for the first time, and some even delivered materials to children who couldn't download them. Rather than typical phone calls that relay disciplinary news, these have been calls to check in with families out of concern for their well-being and a desire to connect.

Teachers, who may have been worried about talking to parents because of their lack of facility with the parents' home languages, have been surprised by shared experiences and new opportunities to connect with parents.

We suggest that teachers continue to reach out to families and to students by continuing a practice of beginning each class by checking in with each student (and with each other) that many have started with their online classes: How are you? What do you need right now? What is giving you joy? We suggest that district leaders and building principals make decisions that ensure that teachers have the time for this important work.

Next, educators might start with both what and how their students have learned during the pandemic. They might invite students to share what they've experienced during the pandemic and how they have felt through poetry, art, music, dance and theater, rather than focusing on test-taking skills. Educators might help students investigate the social and political systems that have led Black and Brown communities to be impacted more negatively by the pandemic and policing. And they might provide opportunities for them to connect what they've learned about the spread of covid-19 and vaccines to a broader understanding of disease, medicine and public health. [...]

We will need students' initiative, creativity and wisdom in the future, to help us promote racial justice, face the worldwide climate emergency, address the next pandemic or public health emergency more quickly and dream new ways of living in better relation with one another and the planet. As we emerge from the pandemic, let's find ways to support our students and affirm what they have gained this year not what was lost.

Document 4

From a distance

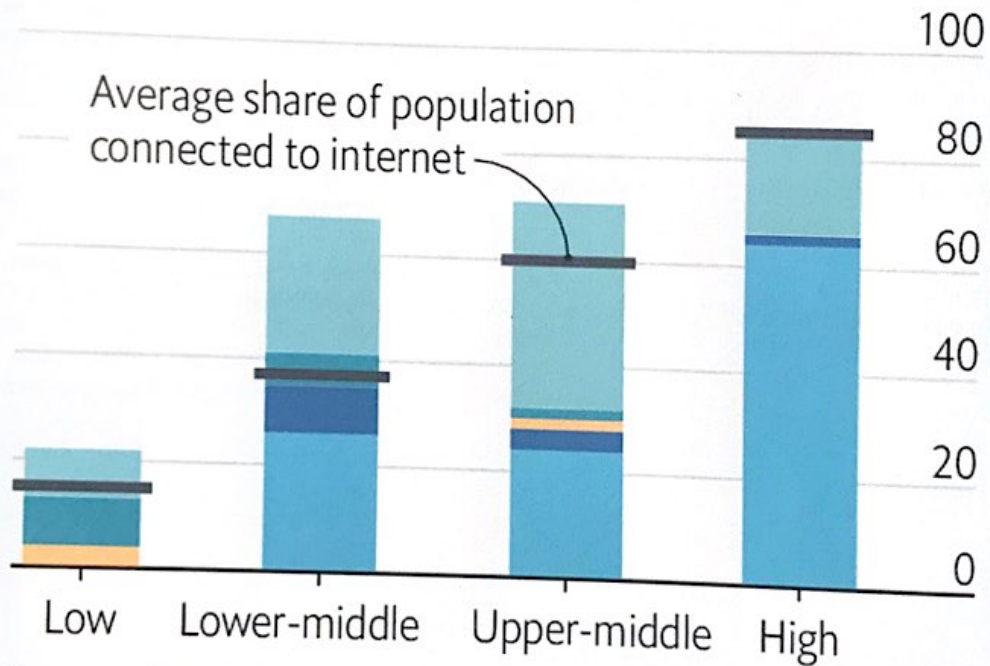
The Economist, 30 April 2020

From a distance

Countries' response to school closures

By remote-learning type and income group, %

Online only TV only Radio only TV & radio Online & broadcast*



Sources: Brookings; Centre for Global Development; World Bank

*TV and/or radio

The Economist

B. Document 5

How technology can make up for bad, absent teachers in poor-country schools*The Economist*

17 November 2018

Like teachers, digital educational technology comes in many forms, from wonderful to appalling. But, used properly, it now deserves more prominence in schools—especially in poor countries where human teachers are often ignorant, absent or both.

The UN's Millennium Development Goals included the ambition that by 2015 all the world's children would complete primary school. This has largely been achieved: nine out of ten children are now enrolled. Alas, the figure is not as impressive as it sounds. Even though most of the world's children go to school, an awful lot of them learn pretty much nothing there. According to a recent World Bank study of seven sub-Saharan African countries, half of nine-year-olds cannot read a simple word and three-quarters cannot read a simple sentence. The reason is terrible teaching.

Paying teachers more, in the hope of recruiting better ones, is not the answer. In poor countries, teachers are well paid by local standards—annual salaries are four times GDP per person in India and five times in Kenya and Nigeria.

As for absenteeism, if expensive teachers do not turn up to class, governments would, surely, sack them? Easier said than done. Poor governments often lack the wherewithal to check on teachers in distant villages. And in many countries, teachers' unions are powerful and governments fear their wrath, so members' jobs are safe.

Several recent studies suggest ed-tech can help. It seems to bring about bigger improvements in poor countries than in rich ones. In a study of a range of interventions in poor countries—including smaller class sizes, nutritional supplements, deworming and incentives for teachers and pupils—tech had the biggest effect.

Some of the scarce resources being spent on teachers could therefore be better spent on ed-tech. That does not mean dumping computers on schools in the hope that children will understand how to use them, a folly on which plenty of money has been wasted. Instead, it means providing schools with software that children can use with minimal help from an adult, that gets things right more often than the teachers do, that adjusts itself to the child's ability, that sends teachers prompts about what they are supposed to be teaching and that allows the authorities to check on whether the teacher is in the classroom.

Sceptics may wonder whether the poorest places have the necessary infrastructure. But Africa is electrifying apace—in Kenya, electricity coverage has gone up from 27% to 55% of

households in three years. Where the grid is not available, solar chargers can work. Schools do not need internet access. Devices can be taken to where there is a connection to upload or download the necessary information. Cost does not have to be a huge problem either. Tusome ("let's read" in Kiswahili), one of the most successful schemes, costs around \$4 per child per year in Kenya, where it is being rolled out across public primary schools. The biggest issue is the government's commitment: where it is enthusiastic, the chances of success are good.