# Recycling our way towards a fairer education system

"Teaching is actually such a small part of being a teacher now. Teaching has become a social service; with cuts to other social services, across family support and local authority support, schools remain this bedrock of local communities."

I'm talking to Rich Clensy, who's been a school governor in Tower Hamlets since he was 24, and is now the co-founder of <u>TechInclusionUK</u> – an education-focused social enterprise, which came about during UK lockdown to tackle the suddenly glaring problem of digital exclusion.

When all schooling shifted online, the government, along with charities, social enterprises and the private sector, moved rapidly to make sure it functioned as smoothly as was possible. Digital exclusion – exemplified by the fact that in the UK 700,000 of those aged 11-18 have no home internet access (via a computer or tablet) – could no longer be kept on the back-burner.

The government reaction, according to Rich, was "great but also very slow". "There are laptop initiatives that the central government has set up from the Department of Education and the Department of Media and Culture, but they have been slow because they were working at scale from day one."

"You [also] had reactions from Google and Microsoft, who basically opened up

Google Classrooms and Microsoft Teams to education institutions to be able to provide at-scale resources very quickly."

"That was awesome – but actually there are swathes of the country that don't have reliable internet connections, and they also don't have access to devices to connect to the internet with. So it's great that Big Tech reacted very quickly to make these platforms available to use, but it only helped the people that had the at-home infrastructure."

## So, what's the premise of TechInclusion?

After a text conversation about the ways (technological) deprivation was impacting on education, Rich and his now-cofounder Collette decided to do what they could to help out close to home in Tower Hamlets. "We thought – how do we get laptops into the hands of disconnected people?"

Rich, who previously worked in tech and operations and spent the early days of lockdown volunteering with <u>Meals for the NHS</u>, and Collette, who has a background in data security, combined their skills and looked towards the world of business for a solution. <u>They thought about e-waste</u> – the amount of hardware thrown out by businesses because of the need to upgrade – and came to understand that the principles of the circular economy could be applied within the world of education.

"We started primarily as education first, and we have built out more of a sustainability element, because actually the two really go hand in hand. We've realised that buying new tech isn't a sustainable solution to this ever-growing need within education."

TechInclusion takes old office laptops, phones, tablets and so on, and repurposes them so that they're fit to be used by schoolchildren. The

organisation deals with everything from collection logistics to the all-important wiping of sensitive data, which, according to Rich, is the main hurdle. "Most enterprise-level businesses will ultimately destroy devices because the risk of data leaks is not worth having it recycled."

To combat this common anxiety, TechInclusion works with people who have been doing data security and data wiping for a long time. Hardware is wiped to meet GDPR and WEEE regulations, and businesses are kept informed about where their devices end up. "Our long-term aspiration is to be very transparent about how our circular solution works," says Rich.

### The scale of the e-waste problem

How easy is it to repurpose and recycle technology in general? I ask. Is the circular economy something that a designer will think about – or is it just completely left out of the picture?

"Ethical design doesn't really exist – at least not via major international electronics manufacturers. If you look at older devices, reusing and recycling wasn't part of the initial design. And there is such a rapid technological advance in design, capability, performance that perfectly good devices 'fall from grace' because there's something better to buy. All the while, that machine or device is perfectly usable."

"Parts are not easily accessible; they're not easily replaceable. There are commercial and design reasons for that but ultimately those resources, elements, and metals cannot be easily extracted [for recycling]. Unfortunately, they end up in developing nations; a lot of e-waste ends up in China and parts of Africa, and that has a huge impact on the local ecosystem. You have local or informal recyclers who are essentially burning hazardous plastic to extract the precious mineral or element from the device, which has a knock on effect to local ecosystems, the water supply, toxins that are being burned into the air."

As things stand, the standard lifespan of a new device is 3-5 years, and (by repairing and refurbishing) TechInclusion are able to add several more years for a second user.

"We inject it with 3-4 years more life. We give it to a child to provide them with a window of opportunity. If you give someone a laptop and an internet connection, the limit to their ability to reach their potential is on them and they have access to the resource and the opportunity that they just didn't have before."

## A 21st century education for a 21st century workforce

The government is catching up, with institutions now eligible for a number of laptops depending on their size at the start of a cluster or an outbreak. Looking to the future, schools are also considering solutions like 'device per pupil' – "so that when you enter year 7 you have a device that sees you through right up until the end of secondary school."

And Rich is careful to emphasise that the government has a role to play – that social enterprise cannot plug the gap completely, and that this is a big picture problem. "There is a need from central government to direct policy and think across the whole spectrum of how IT is delivered and how tech is incorporated into education, but also make sure that people have access to internet connections. That, in the UK, is a slightly longer field project – purely because it involves buying from private sector stakeholders, who essentially compete for market share. That's what will slow down a national response to getting people connected."

But in the meantime, the team at TechInclusion have plans to expand their offering to digital skills and education – from coding to design resources – to help young people make the most of their new personal digital resources. For Rich, the internet is a great leveller – one that "encourages curiosity, which then spurs on innovation."

"And that, for me, is why technology is so important, because it will present people with opportunities that they didn't know existed."

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