

Can innovation and technology drive an education revolution?

Since schools across the UK closed at the end of March amid the COVID-19 hysteria, parents everywhere have been feeling the strain of setting up an effective home education system for their children.

Temps de lecture : minute

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Recently, Micheal Gove made clear that he believes sending children back to school is safe and the government have planned a phased reopening, with Reception, Year 1 and Year 6 pupils being sent back first. This has been met with voices both for and against this decision.

Understandably, some parents don't wish to send their children back to school until there is a vaccine, so they're in the homeschooling conundrum for the long haul. A petition asking the government to legally allow parents to keep their kids at home has reached over 500,000 signatures.

Although none of us was prepared for this pandemic of epic proportions, it does prompt a new question, why are our schools so unadaptable to deal with crises and why is home education so hard?

How has education adapted to the COVID-19 pandemic?

The school system is one of the oldest systems in the modern world and it's in dire need of an update. COVID-19 has forced education to adapt

and adapt quickly.

The government has published a list of online learning resources for parents homeschooling, education publishing service Pearson have launched online learning resources and BBC Bitesize recently established an online programme providing daily on-screen lessons in core subjects. Free School on YouTube produces children's educational videos on subjects including art, music, literature, and natural science and TEDEd provides a collection of short lessons on everything in the form of animated videos.

Beyond being homeschooled, higher education institutes are also having to rethink how they educate students. The University of Cambridge plans to hold all lectures online until summer 2021.

The pre-existing problems within education

Before all this, education in the UK already had issues. The number of teachers were steadily declining in a profession that is terribly underpaid in an industry that is underfunded. A small 2018 survey found that many teachers found their work meaningless due to activities such as creating complex seating plans and having to triple mark student's work as well as inspections being constantly around the corner. The pressure to garner great test results increases pressure for teachers and students to be successful in an endless competitive school cycle.

A report exploring AI in education from last year detailed how school inspector Ofsted are responding to growing criticism by announcing that they are decreasing the importance of outcome data and utilising measures such as 'personal development' and 'behaviours and attitudes' when it comes to their inspections.

In an information-overloaded world, how helpful is it for students to be

taught to retain and reiterate information when most of it is at our fingertips? Perhaps education should focus on teaching students how to think critically and source real information over fake information as opposed to memorising facts and figures.

So, COVID-19 exasperated a system whose cracks were created a long time prior. In this crisis how can tech help education out?

A look into AI aided education in the UK

Educ-AI-tion Rebooted? A 2019 report by innovation foundation Nesta discovered that artificial intelligence has the tools to transform education in the UK while addressing some of the key challenges the industry faces. What they describe as a potential “Fourth Education Revolution” sees AI being implemented to tackle “teachers burdened with excessive workloads, “one-size-fits-all learning,” “inconsistency of education provision” and “lack of social mobility” among other issues.

AI could really help schools to become less rigid spaces and cater to each student’s unique learning style while getting to know new tech skills.

What companies are making it work?

There are EdTech companies that are already providing alternatives or enhancing the traditional learning process. MakerClub has an original and active approach to teaching kids how to code alongside other STEM subjects. They offer a hands-on electronics kit for children to make and build tech as well as tangible products that teach them how to program computers which sounds a lot more interesting than trying to memorise information.



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Sparx is an innovative offering for maths education from Key Stage 3 to GCSE levels. The system uses math questions and videos to educate students and save teacher's laborious tasks of lesson planning. Sparx utilises video tutorials whilst collecting data points from students to create a personalised learning experience (which is great for teachers to understand their students academic level better too). There's also a homework edition to support homeschooling.

Interactive learning definitely provides a welcome change from outdated and dull textbooks and Curiscope does just that by using augmented reality to bring science to life. Their products include a poster that showcases the universe up close and a T-shirt that reveals the inside of the human body.

Magpie Education offers STEM kits to schools consisting of robotics, 3D printing tools and coding kits alongside lesson plans for project-based learning.

Education needs to be brought up to date

The Nesta report surveyed 1225 parents across the country and found that 75% of them would be happy for AI to be used for educational purposes in schools. If society is on the brink of huge change, then education should be one of the first sectors to transform. It sows the seeds of inspiration and expertise for children who will be tomorrow's adults and leaders. It needs to be better.



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