

# **Big Tech's privatization of schools: a case study of computing education in England**

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## **Abstract:**

The increasing encroachment of Big Tech companies (Oremus, 2017) such as Google, Microsoft, Apple, and Facebook into education systems across the world has largely been accepted as a neutral force of modernisation, if not actively welcomed as a necessary revolutionization of an outdated institution. These companies have found governments and publics concerned about the quality of the education that students are receiving, if young adults are entering the workforce with “21<sup>st</sup> century skills,” and whether their countries will remain competitive in a global, digitalised economy. In turn, Big Tech has found a new market and user base for their products, and a fresh source of accessible, comprehensive, useable, and saleable data.

Big Tech have positioned themselves as innovators who can produce “products and ideas to drive impact for students and educators” by “igniting innovation and learning,” and who tout their online stores as one-stop-shops for “preparing student and teachers... to meet the future’s biggest challenges” with “programs and resources to develop skills for the future” (Google, 2018). Some promote their interests in education as philanthropic, aiming to provide tools and systems that will overcome inequality and academic under-achievement by managing students’ attention, emotions, and behaviour (Pinkerton, 2017; Williamson, 2017a).

Behind many of these products, however, are serious practical and ethical issues. Some companies collect large quantities of intrusive data about minors that can be sold to third parties, be made available to governments, or are vulnerable to hacking by malicious actors (Haimson, 2017). Others mislead schools into wasting limited public funding on systems grounded in debunked educational theory or products that cannot do what they are advertised to be capable of (Watters, 2017). And lastly, some companies are completely replacing traditional public educational services with those that fit their own needs, creating state-funded technical training school chains (IBM, 2012, 2018; SAP, 2015; Williamson, 2017b), organising and promoting networks of schools who use their products (Microsoft, 2018), or developing online learning platforms that largely replace the teacher as educator (Brown & Frankel, 2016; Chan Zuckerberg Initiative, 2018).

Schools – facing general funding shortfalls but attracted by technology-focused grants, low-cost pilots, or the touted economy of replacing teachers’ labour with digital solutions – are challenged to a balancing act: on the one hand, the safety, well-being, and data privacy of their students, and on the other, the allure of streamlined data collection and processing which promises to provide administrators with better insight into economizing their institutions’ services.

But Big Tech’s influence is not limited to selling the latest brainwave-reading headbands (Dellinger, 2016) or VLEs (Williams, 2014): they are also playing a powerful role in the creation and execution of national educational policy (Department for Education & Gove, 2014). This presentation will explore the role that international tech companies played in the introduction of computing to England’s National Curriculum in 2014 and the control held by Big Tech and their allies over the national discourse on the need for – and success of – this privately supported shift in public policy.

Using extensive qualitative data from two studies on computing education in England’s primary schools, this presentation will explore: 1) the role that Big Tech had in promoting the replacement of a national ICT curriculum with a narrowly focused “computing” curriculum (Department for Education & Gove, 2013; Twining, 2013); 2) why computing isn’t being taught, either rigorously or at all, in many classrooms

(Dickens, 2016; The Royal Society, 2017); and 3) how Big Tech companies and their allies are shaping the discourse around education policy in England for their own gain (Agent4change.net, 2017). These are important questions to answer as society's hopes and troubles are often laid at the feet of formal education (Dewey, 1967), all the more so as new forms of technology and technological training are integrated there. Does England's computing curriculum teach young people how to think critically and creatively, challenge traditional social and economic structures, and find lucrative and personally fulfilling employment? Or "does [Big Tech's] push for 'self-directed learning' feed a libertarian anti-institutionalism" and "the mantra 'everyone needs to learn to code' serve the interests of global capitalism" (Watters, 2015)?

England's new computing curriculum, it would appear, is "ideologically freighted" (Selwyn, 2014) with the values of its creators and advocates: Big Tech companies interested in the publically funded training of their future workforce and politicians looking to increase the prestige of London's "Silicon Roundabout." The results of these two studies will illuminate why we should be wary of the privatisation of such an important public service as free, compulsory education.

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