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Peopling the crowded education state: Heterarchical spaces, EdTech markets and new modes of governing during the COVID-19 pandemic

Francesca Peruzzo ^{a,*}, Stephen J Ball ^b, Emiliano Grimaldi ^c

^a University of Birmingham, UK

^b University College London, UK

^c University Federico II, Naples, Italy

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ABSTRACT

In this paper, we examine a set of complexly related education policy issues that concern changes to the form and technologies of the state, and changing modalities of government and processes of policy and service delivery, and concomitantly, the re-agenting of education policy within extensive but exclusive policy networks. We also explore the role of the state in creating opportunities for business and social purpose organisations within the delivery and management of state education in response to the ambitions of EdTech (Education Technology) companies seeking to sell their products within the state system. The time is that of COVID-19 and lockdown (2020-2021) and the case is the English Oak National Academy (ONA) – a national platform for remote teaching and learning resources that was conceived and created in England in April 2020, with funding from government and various philanthropists, and designed and run by a team of third sector and business policy entrepreneurs. Alongside and in relation to the ONA we consider a series of UK government policy papers on EdTech, interrogate the membership of the EdTech Leadership Group (ELG) and of the EdTech Advisory Forum.

1. Introduction

In this paper, we examine and discuss a set of complexly related education policy issues, at a particular point in time, in relation to a specific case. These issues concern changes both in modalities of government and processes of education policy and service delivery. We deal in particular with the transformation of the form and technologies of the state and concomitantly, the re-agenting of education policy. We also explore the role of the state in creating new opportunities for business and social purpose organisations within the delivery and management of state education in response to the ambitions and tactics of EdTech companies seeking to sell their products within the state system. We connect all these processes to ethics, and in particular to the reshaping of the curriculum and teachers' practices and souls – through an emerging form of teacher governance of the self. These three issues are complexly interwoven in the politics and practices of education, and in the presentation of data and argument in this paper. (See [Fig. 1](#))

The time we address is that of COVID-19 and lockdowns (2020-2021) and the case is the English Oak National Academy (ONA) – a national platform for remote teaching and learning resources that was conceived and created in England in April 2020, with funding

* Corresponding author.

E-mail address: f.peruzzo@bham.ac.uk (F. Peruzzo).

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from government and various philanthropists, and designed and run by a team of third sector and business policy entrepreneurs. We locate this policy formation process within a broader series of UK policy papers that pre-dated the pandemic but that enabled the ONA to become an educational (and political) entity. The creation of the ONA is a particular example of what Peck and Theodore (2015) call 'fast policy'. That is to say, policy that is imbued with 'heightened immediacy, saliency, and indeed urgency' and which is played out and then brought to realisation within a 'compressed policymaking moment' (ibidem, p. xvii). That moment in this case is produced by the interplay of COVID-19, school closures and EdTech - the former reactive, the latter proactive. We have in this instance, as Peck and Theodore (ibid, p. xvii) put it, both the re-situating of particular 'codified institutional designs and models' – digitalized learning, and some idiosyncratic features that mediate these in English education policymaking – 'charismatic leadership, propitious local circumstances, and the presence of supportive partners' and the peculiar urgency and interruption of COVID-19.

To address the issues and the case the paper seeks to identify a sprawling, sometimes bewildering, network of actors, organisations, attitudes, reviews, reports, events, discourse, hardware and software, statements, sales pitches, visions and interests associated with the advocacy of EdTech as a solution to specific and general problems of education (as identified by government). This EdTech policy network (Fig. 2), as we shall see, is diverse, hybrid and unstable, it is evolving and adapting, and merging with and piggy-backing on other more established networks of agents and organisations that are themselves one small part of a bigger and longer term reworking of the state, and of governance and education policy in England. The network 'consists of loosely connected actors with varying degrees of institutional leverage located in multiple "sites" that are not always geographically fixed (Wedel et al., 2005). At the same time, the network acts as a dispersed epistemic/discursive community (Ball, Junemann and Santori, 2017, p. 21), that shares, reinforces and circulates a distinctive set of policy vocabularies and ideas, problematisations and solutions, and ethical attitudes, missions and ambitions. The particular network we identify has 'a limited number of participants with some groups consciously excluded; frequent and high-quality interaction between all members of the community on matters related to policy issues; consistency of values, membership and policy outcomes' (Rhodes 2006, p. 428). As an epistemic community, it consists of a complex of relationships based on partnerships, funding, incubation, emulation and adaptation. Within this community certain actors are key, they are animateurs, border-crossers, policy entrepreneurs and influencers. They make contacts, careers and make things happen – they are modern day 'connection men' as Saunier (2001) calls them (and they are mostly men) or are 'model peddlers' in Peck and Theodore's (2015) terms or 'experts of truth' (McCann 2008 p. 885). They 'carry their previous successes with them as part of their credibility – and they know people and know people who know people, and attend sites of activity in which they get to know more people' (Ball, Junemann and Santori, 2017 p. 47).

This policy network and the policy processes that unfold through its relations are dispersed in space and time. Our focus is on England but there are various mobilities and connections within and across the network involving multiple geographies and the 'promiscuous entanglements of global and local logics' (Ong 2007 p. 5) – we have no space to pursue these properly here. However, we do not underestimate how such mobilities imply how 'humans are mobile', how 'people mobilize various objects' and how 'technologies facilitate movement' (McCann, 2011, 112). In this sense, these tech people create connections by moving on a global level and exporting their fast innovations, in fairs and online exhibitions that cross countries and cultures, promoting digital technologies and

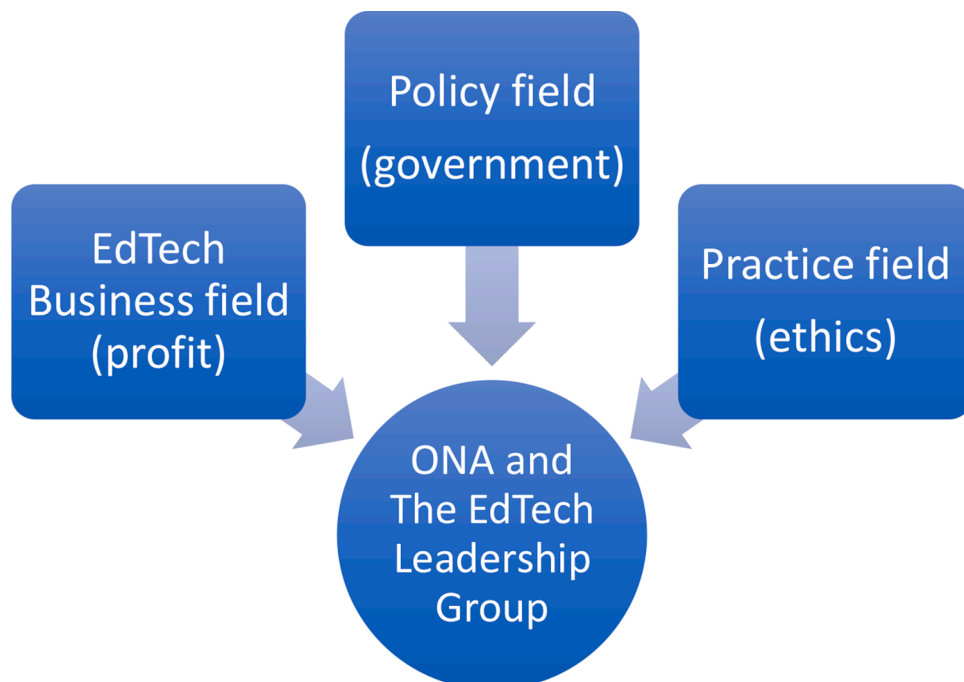


Fig. 1. EdTech in the time of COVID-19.

Education	Industry
United Learning Trust - Dominic Norrish	Apple - Chris McFall
Star Academies - Sir Hamid Patel (DfE adviser)	Microsoft - Chris Rothwell
Ark - Lauren Thorpe (Ofsted, JISC, Reform)	Google - Dean Stokes
The Chartered College of Teaching - Cat Scutt (The Girls' Day School Trust, ActiveOPS)	Amazon Web Services - Chris Hayman
OFSTED - Matthew Purves (now National Director of Education Services at Academies Enterprise Trust)	Emerge Education - Nic Newman
Open University - Peter Twining (now University of Newcastle, Au)	British Educational Suppliers Association - Caroline Wright
Association of Colleges - David Cork	Joint Information Systems Committee (JISC) - Paul Feldman
Association of Schools and College Leaders - Duncan Baldwin (Leora Cruddas)	The Education Foundation - Ty Goddard (EdTechUK, HomeLearningUK,)
Institute of Education-University College London Becky Francis (now CEO of Education Endowment Foundation)	NESTA - Joysy John
Education Endowment Foundation - Stephen Fraser	Innovate My School - Micheal Foreshaw
Ambition Institute - Matt Hood (ONA)	University College London (EDUCATE) - Rose Luckin
National Association of Head Teachers - James Bowen	
Independent School's Council - Ian Phillips	
London Academy of Excellence - Scott Baker (John Blake now Ark)	
Grimsby College - Debra Gray (Association of Colleges, JISC)	
Parents and Teachers for Excellence (Inspiration Trust) - Mark Lehain (Bedford Free School)	
Bukky Yusuf (Foundation for Education Development, Foundation for Educational Development (FED), Innovate My School)	

Fig. 3. EdTech Leadership Group Membership.

that this linking (understood as a folding) of global comparative technologies induces local affects, performativities and subjectivities that reassert the centrality of the local disciplinary function within education. A key point in the argument we make in this article is that across these relations among the 'older' and newer actors it is possible to observe not only major transformations in political structures or the management of the education state, but also the functioning of a specific form of educational governmentality, an *ensemble* of 'institutions, procedures, analyses, reflections, calculations and tactics' (Foucault, 1991, p. 102-103) that targets teachers as a population and exercises a form of power which combines the regulatory knowledges and techniques of advanced liberal societies (e.g. bureaucracy, assessment and evaluation, continuing professional development - Hunter, 1996) with digitalisation, datafication and the technical devices of digital governance (platforms, Learning Management Systems, digital hubs, datawarehouses among many others - see Williamson, 2017). Here, our attention goes to the minor tactics of governing that unfold across these relations, where 'government' refers more broadly to the way in which the *conduct* of individuals or of groups might be directed - the government of souls and of communities. *To govern, in this sense, is to control the possible field of action of others.* It means providing the tools, the means and the objectives and the rationale to govern and be governed in a certain way. Here there is a double-layer, or double-scale of government. This community of actors are both a policy community, self-governing and self-sustained; and a *governor* providing a field of best practices, that hail teachers and shape their self-governance according to the forms and rationale of the market.

To grasp the complexities of these policy processes as changes in modalities of government and processes of education policy and service delivery, both in terms of heterarchical governance and governmentality (Jessop, 2016), we discuss the ONA network looking at three areas of inquiry:

- the emerging epistemic terrain, i.e. the distinctive ways of thinking and questioning that mobilise specific vocabularies and procedures for the production of truth about education and education policy, and unfold through the network relations combining into a certain ideal of education government.
- the changing topology of education policy, i.e. the recombination of the forms of ruling education, the relation among its authorities and expertise, the elasticity and deformation of multi-scalar interdependencies across national/global localities, and the modes of acting, intervening and directing its processes and subjects.

- the shifting technologies of the self, i.e. those characteristic ways of forming subjects, selves, persons, actors or agents within this new topology of education policy-making.

2. Understanding the crowded education state through a distended case approach

To address this series of issues we examine the ONA as what Peck and Theodore (2015, 30) call a “distended case”. That is, we ‘set out to explore a range of sites variously connected to particular communities of policy practice or philosophy, or heterogeneous networks of innovators, emulators, adaptors and circulators, probing their frayed edges as well as their centers of authority’ (ibid, 39). The entry point in this case, the node from which we begin, is the ONA as a centre of innovation. The ONA brought together a set of actors on the boundaries of education, philanthropy and business, who were able to manoeuvre within and across those sectors swiftly and effectively to mobilise a ‘solution’ to the problem of COVID-19 and schooling, as that problem was articulated by the Department for Education (DfE). ONA “is an organisation providing an online classroom and resource hub in the UK. It provides teachers with free lessons and resources for pupils aged from 4 to 16, from reception to year 11” (<https://www.thenational.academy/about-oak>).

The data we draw on here were found on websites, in news items, press releases, business biographies and other internet sources (podcasts, blogs, interviews) that contribute to a snapshot of policy activity, one that was out of date as soon as it was complete. While primarily substantive the paper grapples, as it must, with the problems of network research, writing and representation. In this instance, the search for data and its exposition ‘entail(s) methodological travel, along the paths carved and through the spaces made by the policies themselves’ and particular nodes in the moving landscape of EdTech were selected as points of departure (Peck and Theodore 2015). This consists of what Peck and Theodore call an ‘improvised methodology’ (p. xxi) involving ‘network immersion’. Peck and Theodore make another pertinent point of which we were continually aware:

We had to avoid becoming dupes of the policy networks themselves, getting hooked on the catchiest policymaking tunes, or becoming enrolled into the choral societies that tend to form around favored programs of reform. These challenges are compounded, of course, by the fact that many of the most successful intermediaries and interlocutors in these fast-policy worlds are themselves charismatic actors and savvy entrepreneurs. They are successful in part because they are engaging and eloquent cosmopolitans. They are armed with well-polished scripts and a surfeit of supporting evidence; they are accomplished persuaders. While this was, in part, the very world we wanted to understand, it also necessitated at least a measure of contrarian skepticism ... and a sensitivity to contradictory and countervailing evidence. (xxi-xxii)

The network in Fig. 2 is a heuristic which ‘displays’ aspects of the practices of government, the minor tactics, which operate within the institutions and procedures of a policy community – albeit here a ‘fictional’ one. It is a dry illusionary device for representing some aspects of the relations and form of governmentality it adumbrates, a useful metaphor, not outside of the truth, but not entirely or simply true. It is brought to life with different degrees of sociability and a language of animation and persuasion in meetings, events and encounters, which are inaccessible to the research or only fleetingly glimpsed in tweets and social media entries.

In practical terms we began with:

- (i) a set of government policy papers - the *Realising the potential of technology in education (2019)*, and two other documents that prepared the terrain, the *UK Industrial Strategy – Building a Britain fit for the Future (2016)*, the *EdTech digital strategy* released in March 2017, which as an ensemble create the ontological and epistemic possibilities for the ONA to come into being.
- (ii) the ONA initiative, interpreted as a set of movements, circulations and connections.
- (iii) a number of heterarchical actors that institutionalized the ONA. These actors recur across the network, in various roles and guises, they operate across different sectors (public, private and third), they are ‘thought leaders’, advisers, representatives, innovators, entrepreneurs in two cases, and animateurs. Their involvements also point up the recurrence of other actors and organisations that constitute part of the infrastructure of education policy within the EdTech field and beyond.

Using the papers, the group, the actors and the events, we describe an emerging epistemic terrain and illustrate the inter-twining and layering of people and organisations within policy processes (relations within and between policies, specifically those entailing *de/restitution*), in service delivery, the advocacy and the sale of educational innovations and ‘solutions’, other sales and marketing opportunities, philanthropy and opportunities for profit. Moreover, we want to point to the functioning of a complex ‘machinery for incitement’ to continuous action and intervention, innovation, development and improvement, that remakes teachers as prudential subjects (Dean, 2010), subjects who should govern themselves as responsible individuals who are in an unstable relation with their environment and resources. Overall, our aim is to demonstrate what might be termed the density or thickness of the policy process. To lay out this inter-twining and layering within a one-dimensional narrative is difficult and awkward. The text below is not best read as a linear account and developmental argument but rather as a series of policy events constituted by specific memberships and relationships that join up different people and different spaces in relation to changing priorities.

3. Opening epistemic spaces for the intersection of EdTech market and education

The policy event addressed here is traced from 2019, although there is a much longer and complicated history to EdTech policy and practice (Williamson, 2019). It was in 2019 that the then Secretary of State for Education Damien Hinds, announced a government EdTech strategy in the policy paper *Realising the potential of technology in education*. This was a reiteration and elaboration of the *EdTech*

digital strategy released in March 2017 and the *UK Industrial Strategy – Building a Britain fit for the Future* (2016). Hinds described *Realising* as ‘a strategy for education providers and the technology industry to help improve and increase the effective use of technology in education’ (Published 3rd April 2019)¹. The stated rationale underlining the strategy was to address a series of challenges faced by schools and colleges, including: i) reducing teachers’ workload; ii) increasing efficiency; iii) improving accessibility and inclusion; iv) supporting excellent teaching; and v) improving student outcomes. Through this policy paper and the related programme the aim was, it was claimed, to tackle the barriers that teachers leaders and lecturers face in engaging with and benefiting from technology, as well as the barriers that the UK EdTech industry faces in terms of both start-up and growth. The strategy was intended to support all stages of education and to get the education sector and UK EdTech industry to work together, and ‘to catalyse business investment ... and drive demand’, as well as create a ‘sector identity’ and cross-sector’ guided by a ‘clear vision and sector leadership’ (*Realising* policy, 2019, 2) - market making to simulate the EdTech market by opening epistemic spaces for the market and education to intersect through facilitating opportunities for buyers and sellers to meet, and test products in the real world by building evidence-base effectiveness of EdTech products and services – a version of ‘doing well by doing good’ – social capitalism. A newly established EdTech Leadership Group, made up of representatives from across the education sector and from the EdTech industry was given the task of finding new ways to collaborate and to produce an EdTech agreement by the end of the year 2019². The plan also included developing digital capabilities and skills, in particular through a newly established Demonstrator Schools and Colleges Programme, which aimed to develop peer-to-peer support and training to schools by selected institutions that distinguished themselves in digital education. Here the state is acting as a market midwife, fostering and forging an infrastructure within which the private sector can flourish and at the same time addressing what are identified as entrenched problems with the education sector – problems related to the take up and use of EdTech within teaching and learning.

The policy paper and the setting up of the group was timely in another sense, it created a grid for thought and action for education through which a response to the COVID-19 pandemic and the periods of school closure could be cobbled together. The policy space opened up for big EdTech with its constituent personalities and apparatuses by the policy papers and by the pandemic enabled business to respond to and ‘profit’ from a set of swift (but uneven) moves to remote learning. The members of the EdTech Leadership Group, on which major companies in the field such as Google and Microsoft and various national organisations concerned with education were represented, were in a position both to fashion and ‘benefit’ from the educational ‘response’ to the unfolding health crisis. While we do not have the space to follow them all, the members recur in different conferences, fora, evidence-based reports, committees, podcasts and websites, across national and international spaces. Furthermore, almost all of the charities, Community Interest Companies and community organisations involved here, also have business representatives on their boards of trustees and frequently have partnerships and sponsorships with and from businesses. Again, there are various links to the Academies programme, Ark and Teach First (Fig. 3).

These people and organisations feature in the network depicted in Fig. 2. The Figure indicates numerous overlaps between business organisations and educational ones, and the career movement of individuals across and between organisations and sectors. This is a relatively closed coterie of people and organisations.

4. Reconfiguring the field of EdTech policy and provision during the pandemics

In response to the pandemic in England the UK government launched a lockdown and working and studying from home policy, with (at least in policy/theory) schools and colleges switching to home online learning from March 20th 2020³. However, many schools were unprepared to move lessons online, many teachers lacked the skills necessary to deliver online teaching, and many children and their families experienced problems due to shortage of technical equipment, or the absence of internet connection or were unable to afford internet accounts – all of which had been signalled as difficulties in the 2019 Paper. This situation stimulated a substantial investment from the State to enable the extension of remote education in the shortest time possible. On April 24th, the Government announced a refocusing of the existing Schools and Colleges demonstrator programme, with additional £8m in May 2020 to identify more schools able to take part, and a further £100 million to enhance remote education: £85m for laptops, tablets and 4G dongles; £14m for technical support to schools and £6m to further support the demonstrator schools and colleges programme.

At the same time big EdTech companies like Google and Microsoft strategically gifted the government, schools, teachers and students their platforms, like the G-Suite and 365 Education⁴. Concomitantly, there was a flourishing of initiatives from providers of educational materials and contents that were offered to schools, teachers and families as ready-to-use solutions to be uploaded onto platforms and Learning Management Systems for use in remote teaching - like the ONA. However, later in April 2020, James Leonard, the UK Lead for Google for Education, claimed that England, compared to Wales, Scotland, and Northern Ireland, was ‘lagging behind from the start of COVID-19 crisis because it lacked a national EdTech platform’. As reported by Tes, a national publication aimed at education professionals, in his speech at the Westminster Education Forum on the future of Edtech in England, ‘Mr Leonard said a

¹ <https://webarchive.nationalarchives.gov.uk/20200304053218/https://www.gov.uk/government/publications/realising-the-potential-of-technology-in-education>.

² <https://www.gov.uk/government/news/expert-group-launched-with-46-million-investment-in-edtech>.

³ With the exception of vulnerable and key workers’ children, who continue to go to school throughout the whole duration of the lockdown.

⁴ chrome-extension://efaidnbmninnbpcjpcgclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.ednfoundation.org%2Fwp-content%2Fuploads%2FEdtech-Vision-2025_FINAL_Compressed.pdf&clen=1406177&chunk=true.

number of schools were “caught out in the rain” partly due to the “decentralized nature of the system”⁵. Whilst, to ease the adoption of both G Suite and Office 365, Wales had already implemented Hwb, Scotland used Glow and Northern Ireland C2k as country-wide digital platforms for teaching and learning activities, England was still unprepared. Leonard argued for ‘an educator designed and led, national platform for useful, secure and reliable resources’: and the establishing of ‘a unified super-fast broadband infrastructure implemented via Government investment, partnership with Telecom companies and building on existing super-fast networks or approaches’ and concluded that ‘We need to capture the learning across the UK education system to design more resilience across the sector including digital approaches’⁶.

The government response to the COVID-19 crisis created a new field of EdTech policy and provision – dominated on the one hand by the Google and Microsoft platforms and supported by various intermediary organisations. In this field there are numerous educational spaces in which innovators, philanthropists, (social) entrepreneurs and companies, large, medium and small, could operate. Let us then look more carefully at the configuration of this field of policy, the relations flowing across these policy initiatives and programmes and some of the people who animate and enact and speak to and for them. To do so, we will disentangle some exemplary relations constituting this field of policy that are visualized in the Edtech network portrayed in Fig. 2, focusing on those relations in particular involved in the creation and funding of the ONA.

5. The Oak National Academy: fast policies, ‘stable’ networks

In this political and epistemic space one high profile response to the COVID-19 pandemic emerged, the development of an EdTech platform, the Oak National Academy which offers free remote teaching and learning resources to schools. The foundation of the Oak National Academy describes itself as ‘an impressive narrative of effort, love for teaching, volunteering and thought put to save those children that the pandemic had hit so badly, and that were at risk of being marginalized by the swift remote learning turn’. Comparing the effort to create it to a Challenge Anneka – created after Anneka Rice, a philanthropist who financed a number of humanitarian projects to be finished in a very short time – the Oak National Academy Principal, Matt Hood describes how the Team relied on ‘a group of volunteers, all wanting to help, doing their best’⁷.

The scaffolding for the ONA was put in place in just over two weeks in April 2020, The Sutton Trust and Teach First contributed by supplying a small communication team, Johnson Banks, a brand design agency, that had already worked for Teach First, developed a brand identity, an acorn falling as a metaphor of how education works ‘As it falls, it releases seeds and renews’⁸. In less a week, the Academy site collected a set of one hour long digital lessons to cover the curriculum for 4- to 15-year-olds produced by 40 state teachers from across the UK which were then made available, free to use, by teachers, pupils and parents on any device, phones, tablets, laptops. Google offered technological support for free. The Oak National Academy was financed by the government, which initially invested £300,000, and drew upon the efforts of numerous teachers to produce 10,000 videos in just two weeks, delivering two million lessons in its first week of operation⁹. In its early stages, weekly assemblies co-organised with the education magazine Tes saw the presence of the Duchess of Cambridge¹⁰ and of the Archbishop of Canterbury giving the UK’s biggest ever school assembly through the platform, endorsed also by the then Secretary for Education Gavin Williamson (who followed Damien Hinds)¹¹. Described as ‘a minor miracle in its own right, put together by the creativity of teachers and offering free online lessons across age ranges and subjects’¹², the ONA received another £ 4.34 million government in June, in order to remain as a free resource available to all schools throughout the school year 2020/21.¹³

To disentangle the heterarchical and fluid conformation of the ONA as a topological policy network, let us look more closely at the founders and leaders of ONA (see Fig. 4). Matt Hood, the Principal, an economics teacher by training, was also one of the founders of the Ambition Institute, an organization that runs training programmes for both school leaders and teachers focus on children from disadvantaged backgrounds. The Ambition Institute is the result of a series of institutional merges – Institute for Teaching, Ambition School Leadership, the Future Leaders Trust and Teaching Leaders, all originally supported by Ark Ventures, part of the education charity Ark¹⁴. An adviser to the DfE, Hood was also on the EdTech Leadership group in 2019. Tom Rose, the Programme Director of the Oak Academy, was also employed at Ark Ventures and trained as a teacher through Teach First combined with five years as a strategy consultant for OC&C, a consultancy firm committed to ‘help top management of major multinational corporations and leading national companies as well as private equity firms, governmental and other public institutions develop winning strategies’¹⁵. He has also had leadership roles with Teach for All and Teach First before moving to the Oak National Academy, he is responsible for ‘the creation of

⁵ <https://www.tes.com/news/coronavirus-google-england-behind-edtech-start-crisis>.

⁶ https://homelearninguk.weebly.com/uploads/1/0/1/8/10180694/protecting_learning_low_res_.pdf.

⁷ <https://inews.co.uk/opinion/oak-national-academy-online-school-home-learning-virtual-lessons-students-explained-421157>.

⁸ <https://www.johnsonbanks.co.uk/work/oak-national-academy>.

⁹ <https://schoolsweek.co.uk/coronavirus-oak-national-academy-delivers-2m-lessons-in-first-week/>.

¹⁰ <https://www.bbc.co.uk/newsround/53084537>.

¹¹ <https://www.bbc.co.uk/news/education-52488305>.

¹² <https://www.bbc.co.uk/news/education-52488305>.

¹³ <https://www.tes.com/news/coronavirus-oak-national-academy-gets-ps434m-stay-open-2021>.

¹⁴ <https://www.ambition.org.uk/about-us/our-history/>.

¹⁵ <https://www.ocstrategy.com/en/>.

ONA Leadership and Board	Ark Ventures	Teach First/Teach for America	Ambition Institute (ARK)	Academy leadership
Matt Hood OBE (Principal) (EdTechLG, DfE)			x	
Tom Rose (Programme Director) (OC&C)	x	x		
Louise Taylor (Head of Production)			x	
John Roberts (Programme and Production Director) (CEO of Edapt, - Teach your Monster to Read, Usbourne Foundation and Ambition Institute)		x	x	
Johnathan Dando (Director of External Relations)		x		
David Thomas (Co-Founder) (Mckinsey, Regional Director of Astrea Academies Trust, strategy director at Inspiration Trust and a principal at its Jane		x		

Fig. 4. Oak National Academy Team.

high quality lessons in line with Oak's curriculum plans'¹⁶. Jonathan Dando co-founder and Director of External Relations at the ONA also worked for more than seven years for Teach First in leadership positions, the last as Head of Marketing and Communication. Moreover, David Thomas, another co-founder of the ONA, was a Teach First graduate and prior to that was Engagement Manager at McKinsey & Company before becoming Regional Director of Astrea Academies Trust and Senior Policy Advisor to the new Secretary of State for Education (Nadhim Zahawi) who came to power in September 2021. On the ONA Board, Ian Bauckham beside being Chair of the ONA is also CEO and Director of Tenax Schools Trust, Trustee of Association of School and College Leaders, Board member of the Confederation of School Trusts and Chair of Ofqual from January 2021. Lastly Leora Cruddas, also member of the EdTech Leadership Group, is a board member of the ONA, founder and chief executive of the Confederation of School Trusts – the national organisation and sector body for academy and multi-academy trusts. Prior to establishing CST, she was Director of Policy and Public Relations for the Association of School and College Leaders (ASCL) and prior to that was a Director of Education in two London Local Authorities. Ed Vainker, CEO of the Reach Foundation and the co-founder and Executive Principal of Reach Academy Feltham- founded in the first round of free schools in 2012 - had previously been on the staff at Teach For All, started teaching in the first cohort of Teach First and was a literacy adviser to Ark Schools. He worked with Jon McGoh a friend from Cambridge founded Reach Cambridge Ltd, a programme of summer residential camps, and founded the Reach Foundation in 2008 and Reach Academy in 2012 (along with co-founders Rebecca Cramer and McGoh). The Reach Academy is also an EdTech Demonstrator school. Vainker has sat on a number of DfE and other policy panels, including the Department's COVID-19 Recovery Advisory Group, of which Becky Francis (Education Endowment Foundation) and Ian Bauckham, were also members. This group was different from the DfE recovery group that included national union bodies¹⁷, it included academy leaders, charity bosses and others, to help the Department and was criticised because of the secrecy around its membership, the group members were required to sign personal confidentiality agreements.

This fast connected 'stable' network of people was granted further financial stability and educational continuity in 2021, when it was announced that ONA will "stay open and free to use for at least the next two terms" after the DfE approved another grant worth £2.1 million.

¹⁶ <https://www.thenational.academy/people-and-partners>.

¹⁷ <https://schoolsweek.co.uk/covid-advisory-group-signed-gagging-orders-dfe-reveals/>.

Austen College, and Senior Policy Advisor to the new Secretary of State for Education (Nadhim Zahawi).				
Ed Vainker OBE (Board Member) (Reach Foundation, Teach For All)		x		x
Sir John Coles (Board Member) (United Learning, DfE Director General)				x
Leora Cruddas (Board Member) (Confederation of School Trusts, DfE, Association of School and College Leaders)				x
John Blake (Board Member) (Ark, Policy Exchange, Now Teach, DfE Adviser)	x			x
Ian Bauckham CBE (Board Member) (DfE Adviser, Confederation of School Trusts, Association of School and College Leaders, Ofqual, National Foundation for Educational Research, Sabre CT, Tenax)				x

Fig. 4. (continued).

Oak will remain under Reach until at least next spring, but its annual budget will be cut by around 50 per cent. It will remain a “small” organisation providing “effective insurance...at the equivalent cost of £80 per school”.

At the same time, *Schools Week*, another nationally recognised publication concerning education issues, noted “that the Department for Education wants to take Oak National Academy into public ownership, according to the group behind the project.” (21st July 2021).

A *Schools Week* investigation revealed in May how its management team previously proposed turning the taxpayer-funded resource into a private company. The plan would have seen “founding employees” handed a £41 million windfall if successful.

In May it was reported that:

Oak management tabled a proposal whereby they would become majority shareholders of a “social purpose company” to run the online school. The plan proposed securing outside investment for the company, before selling it after a few years – with employee shareholders in line to make tens of millions of pounds. The rest of the company would be owned by a charitable trust that would hold Oak’s assets. The trust would have had “preference shares” which “effectively ‘locks away’ and protects the value created by Oak during the pandemic”. (21st May 2020)¹⁸

The Academy management responded to the news coverage to say that the privatisation proposal was one among several considered and was not being pursued. This was put on the table as private equity experts suggested the value of ONA if moved to the private sector, with ‘valuations in the low hundreds of millions’¹⁹. It was reported that ‘[A] private firm called Sapling Education Limited had been established in March by an Oak director. Oak had been investigating solutions for its future since October’²⁰. At the

¹⁸ <https://schoolsweek.co.uk/oak-academy-scrambles-to-secure-future-as-privatisation-plan-pulled/>.

¹⁹ <https://www.guidedeeducation.co.uk/post/guide-education-founder-loves-the-oak-national-academy>.

²⁰ <https://schoolsweek.co.uk/oak-academy-scrambles-to-secure-future-as-privatisation-plan-pulled/>.

time of writing the longer-term future of the ONA is unclear. However, the Academy continues to explore other avenues for its future, through which it might ‘exploit’ its unique position as a conduit between EdTech and a reformed state education apparatus.

6. ONA as an epistemic, governing and ethical space: the promise of profitability and reparation

The ONA was an example of fast policy (Peck and Theodore, 2015), and a silver bullet solution to the emergency situation created by the pandemic. With projections of an exponentially growing market in EdTech and digital education, and the prospect of repeated lockdowns, the ONA had the potential to be an ontological and ethical space to create new teaching subjects and new digitally expert students; an epistemic space for a policy community that saw public, private, and third sector aligned in the promise of profitability and reparation, and a governing space, ‘to repopulate the state and, more concretely, to restructure the provision of public services through the participation of actors from the private sector (businesses, philanthrop capitalists, social entrepreneurs, etc.)... in order to modernise the old and decaying welfare state system’ (Olmedo, 2017, 70).

Strategically, we can see three different movements within the ONA/EdTech policy community:

- Projecting the ONA as aligning with government policy outcomes, through highlighting existing problems, the creation of evidence-based proposals and the crafting of silver bullet fixes.
- Labouring to connect, with powerful heterarchical actors, experts and policy advisers both public and private, and at the same time speaking directly to teachers. The ‘founders’ are established edu-preneurs who move between infrastructural and high-visibility positions that can connect the public, private and third sectors in seamless ways.
- Deploying low key actors to entrench ONA in everyday mundane school practices, rewriting teachers’ government (governance) and the ways of doing education, borrowing from the business sector so to ensure a new profitable EdTech education market.

In the epistemic space we have mapped, old and new actors and organisations mobilised forums, committees, reports and a deluge of data to create the case for the ONA as a policy response to a series of otherwise unsolvable problems, alongside creating a space in which a digital education market might flourish. Ian Buckham, in an interview released in July 2020 made the point of not all education providers had the capacity to provide the “comprehensive remote education service” that would be required. In particular those schools that serve disadvantaged communities were among education settings least likely to be able to offer this kind of virtual platform at pace. As such, the idea for a national remote school was born, and those involved worked tirelessly over the 2020 Easter holidays to bring together an array of online lessons²¹.

From here, we can see how through *making* existing problems visible, the ONA network strategically moulded itself to state policy outcomes, creating evidence-based quick-fixes to otherwise irremediable education failures. In the late spring of 2020 ONA commissioned an ‘end of term report’ based on data elicited by ImpactED, whose founder and Chair Jonathan Sobczyk²² has been named in the Top 10 Young UK Social Entrepreneurs, and the work of Claire de la Mothe Karoubi, “a results-oriented French-American strategist, researcher, and marketer”. Here ‘business language and models’ are being used to articulate educational practices in new ways (Saltman, 2007, 16).

The ‘end of term report’ was followed by the work of the EdTech Advisory Forum, which released its EdTech UK-Vision 2025 in late 2020. The EdTech Advisory Forum is a coterie of educators, CEOs, headteachers and tech enthusiasts that provide support and advice on tech-related innovations and applications in schools, Illustrating EdTechUK ‘commitment to listen to the whole of the sector’ (from the website²³). Many of them are also part of the EdTech Leadership Group, such as Debra Gray, Principal and Deputy Chief Executive, Grimsby Institute and Jisc trustee, Ian Phillips, Chair of the Independent Schools Council Digital Group, John Jackson, CEO of London Grid for Learning and Ty Goddard, Chair of EdTechUK (Fig. 3). In their report, they praised state funding to the ONA and reiterated the recommendation for a comprehensive resource hub and quality guidance for all schools as ‘COVID-19 magnified the uneven and patchy approach to digital learning in England. Even before COVID-19, schools’ use of EdTech varied widely. The virus highlighted, however, that schools and colleges need support and training’ (Report, 2020, 4). The Report also repeated its advocacy of the role of EdTech business as a key factor in achieving systemic performance improvements and greater educational equality.

By adopting a common (open) standard as a partnership between the education sector and the EdTech industry, we could make it much easier to integrate EdTech applications with institutional systems, and to use advanced machine learning and artificial intelligence techniques to predict learning outcomes and where interventions may be helpful... (Report, 2020 p. 28).

Matt Hood, the ONA Principal asserts that: “The telecoms firms are now really stepping up, and thanks to them, universal access could be a reality”²⁴. Based on findings on how many children, in particular from families of disadvantaged backgrounds were accessing learning material only using mobile data (Ofcom, 2020²⁵), making it difficult to watch the ONA’s videos – ONA struck a deal

²¹ <https://blog.insidegovernment.co.uk/schools/oak-academy-discussion>.

²² <https://impacted.org.uk/the-team>.

²³ <https://www.edtechuk.org/about-us>.

²⁴ <https://www.bbc.co.uk/news/technology-55719428>.

²⁵ chrome-extension://efaidnbmnnnibpcajpcgclclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.ofcom.org.uk%2F_data%2Fassets%2Fpdf_file%2F0037%2F194878%2Ftechnology-tracker-2020-uk-data-tables.pdf.

with mobile network operators, including Vodafone, O2, Three, EE/BT, Tesco Mobile and Sky among others in 2021, to make the ONA website zero-rated, ensuring free-data access to the learning material.

One effect of this positioning of EdTech businesses as ‘saviours’ and improvers of state education is a depoliticisation and de-economisation of market behaviour, detaching interventions and products from their direct relation to profit. The self-presentation of commercial and non-commercial organisations is indistinguishable. The organisations that appear are public, civic associations, charitable, not for profit companies, governmental, community interest – some are not easy to characterize – their status is blurred. The discourses of business and education service and technology coalesce, we see primarily a service face, rather than a business face, fees and costs are not presented up front, profit is not clearly in evidence. On the other hand, public service and charitable organisations act like businesses and take on the sensibilities of business practice. Established *heterarchical* figures are adept both at connecting the public, private and third sectors in seamless ways, and keeping them separate. These figures are also marked by their ability to address the interests of both policymakers and practitioners – to face both ways and speak to both ‘audiences’. They are able to speak about and ‘identify’ ‘problems’ (for policy makers) and provide ‘solutions’ (for practitioners) – and thus rearticulate education in relation to past ‘failures’ and future ‘promises’, offering both a more effective and a fairer education.

Exemplifying ONA as a distended case, a ‘policy “fields,” the uneven development of which routinely acts as a spur to further experimentation and adaptation’ (Peck and Theodore, 2015, xxvi), Matt Hood also spoke about, and mobilised, the successes of ONA at the *BETT Fair 2020*²⁶ alongside Ty Goddard (the co-founder of The Education Foundation and a related organisation *Edtech UK*, and of *EDTECH50*) promoting the EdTech School and Colleges Demonstrators. BETT describes itself as the global community for education technology. As says:

We pride ourselves in providing world class content, networking and discovery of the latest innovations. Across the year, we host webinars, Continuing Professional Development sessions and publish articles from the leaders in education in our Community Hub. Our events in the UK, Brasil and Asia are where we bring our community together to spark ideas, create connections and accelerate trade. (<https://www.bettshow.com/home>) (Partners Microsoft, Pearson, Education Development Trust, Independent Schools Council Research, British Educational Suppliers Association, Tes).

The BETT 2022 website claims 60,000 visitors and 1200 EdTech providers. BETT is a subsidiary of a multi-national company, the Hyve Group plc (formerly ITE Group plc), which is one of the world’s leading organisers of international exhibitions and conferences. Spaces such as fairs are ‘marketplaces for education technologies and are also important political spaces for connecting private and public interests and actors’ (Player-Koro, Jobér and Bergviken Rensfeldt, 2021,1). However, they are also spaces in which nodes and edges stretch their national boundaries, mobilising ideas, money, and stabilising heterarchies.

7. Ed-tech, digital transformation and the heroic innovator: Rewriting teachers’ government and the ways of doing education

While working to produce a set of problematics and solutions at the policy level, and creating new connections through the relentless activity of networking expert actors from leadership positions in academies, academy trusts, some of whom are advisers to the DfE, the loose epistemic/policy community adumbrated here also feeds, constructs and supports changing educational practices on the mundane level of education. Here the ONA works to make EdTech provision as key part of face-to-face teaching and learning practices, play its part in the government and self-governance of teachers. ONA collaborates with teachers and subject associations to align its resources with the national curriculum and has worked to make “the Oak material editable so customizable to teachers’ teaching styles and content, as well as reaching more students without an internet connection by making the material downloadable and printable”. More accessible and bitesized curriculum materials have been added, following teachers and parents’ requests to be able to modify pedagogy and content. Teachers providing new lessons also began to be paid for their time. In line with the Realising Strategy to reduce teachers’ workload, Ian Buckham stated that he was ‘hopeful that the work of the Oak National Academy at least eases the burden of curriculum planning for next year’²⁷. Ian Buckham, in a speech on the topic of assessment delivered in April 2021 to the Confederation of School Trusts Annual Conference

We will want to think hard about how we bring together the experience of the pandemic and the wider, fast developing evidence we now have in areas such as curriculum design, evidence-based pedagogy and assessment, our growing knowledge of the capabilities of technology, and how all these interact, to ensure we have the best possible system in the future²⁸.

All of this is not simply changing the forms of education – curriculum, pedagogy and assessment and related Continuing Professional Development programmes, but also by shaping the ethos of teachers, working on the incitement of new teacher selves and positioning them as key actors in the drama of ‘much-needed change’ – they are hailed as innovators, champions and heroes, as part of a community of ‘solution providers’, operating on the cutting edge of educational innovation - “thank You to all those educators, school and college leaders and support staff for protecting and inspiring learning during these turbulent times” (EdTech Advisory Forum

²⁶ <https://www.bettshow.com/bett-articles/ways-to-support-your-teaching-in-the-new-normal>.

²⁷ <https://blog.insidegovernment.co.uk/schools/oak-academy-discussion>.

²⁸ <https://www.gov.uk/government/speeches/ian-bauckham-cbes-speech-to-the-confederation-of-school-trusts-annual-conference>.

EdTech UK, September 2020).

Join a community of heroes

Share your feedback and help educators around the world find the best EdTech for their children.

<https://edtechimpact.com/about>

At the intersection of education reform, the COVID-19 crisis and, EdTech, there is the emergence of a recurring shared language used in the websites, events, podcasts, tweets and marketing materials. A discourse which seamlessly blends pedagogy and equity with business and marketing. The collaboration of teachers with EdTech businesses, as envisaged in the 2019 Policy Paper, is repeatedly celebrated, as a community of shared interests and endeavours – ‘a global learning eco-system.’ This eco-system is configured and nurtured through the labour of connecting and boundary-blurring, and is made up of networks of friends, partners, members, followers and collaborators who bring their creativity and expertise to bear upon the problems of education and its future. These discourses, relations and subjectivities function as a ‘machinery for incitement’ that mobilises teachers as the responsible and heroic protagonists of the renewal of a failing education through digital transformation and an entrepreneurial ethos.

However, the incitement towards heroes-making subtly works on the teachers’ self-government as reifications of such animated truths. While teachers are celebrated as winners of priorly unthinkable challenges, their souls are craftily unsettled and remoulded according to the fast-paced requests of the market of education, exhibited, bite-sized, and disciplined through new networked, heterarchical learning management systems.

8. Conclusion – policy networks and network analysis

“This could be the biggest sustained, mass experiment in online education since the internet was founded in the 1980s”-Bloomberg

A bewildering array of people and organisations appear in this account, and it is not easy to follow or grasp the routes of policy through the maze of relations portrayed. Even so, the presentation is slimmed down, partial, bounded and selective. A great deal is omitted. Policies are now discussed, formulated and enacted within a multitude social spaces, in a way that reflects what [Smith \(2003\)](#) describes as an ‘ontology of movement’ (p. 562), in which the complexity of networks, flows, fluids and folds are increasingly evident. The types of movement here are physical, virtual, financial and imaginative, though these are ‘tied into at least thin networks of connections that stretch beyond’ ([Sheller & Urry, 2006](#), p. 209) specific sites and particular moments. However, in general terms, we should not under-estimate nor over-estimate the significance or efficacy of these new sites of policy. They are necessary, effective and dispensable; they are radical, vocal and fragile; and they are unpredictable. Their ongoing or fading influence can depend heavily on the vicissitudes of government, the charisma of individual actors and the instability of roles and social relations.

One outcome of this diversity and movement is that the ‘territory of influence’ ([Mackenzie & Lucio, 2005](#)) over policy is expanded enormously, at the same time the spaces of policy have become opaque and dissociated. This account is an illustration of this expansion and in the cacophony of interests and commitments it encourages it is sometimes difficult to know which discourses and voices count most, and where and how key decisions are arrived at. Think-tanks, advisers, thought leaders, philanthropists, websites, blogs, advocacy and membership organisations and entrepreneurial actors of various kinds cross between public, private and voluntary and philanthropic spaces and are able to speak about and speak to policy in the different sites and at the different moments that constitute and animate the new policy networks. Policy discourse flows through these new places, gathering pace and support and credibility as it moves. Many of the influencers, policy entrepreneurs and solution providers who are active in and recur in these spaces of EdTech are also, as noted previously, active in other related and over-lapping fields of education reform (teacher training, academies ad free schools and leadership training in particular), they also interact with various social equity organisations and agendas of equity.

The actors and objects within this network of relations are part of multiple ‘small worlds’. The actors are adept and agile moving in and across sites of persuasion, exchange and opportunity, both public and more intimate. In doing so, they invest in and accumulate forms of *nodal capital* (status, income, influence – awards, peerages, knighthoods, honorary positions). This is a type of social capital that is very clearly ‘the aggregate of actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition’ ([Bourdieu, 1986](#), p. 248). That is to say:

... policy networks provide a space and process for holders of different forms of capital—whether economic, cultural, social, or symbolic—to come together and collaborate to increase the profitability, productivity, and fungibility of the capital they possess ([Koon 2020](#) p. 378).

In terms of the changing topology of education policy and governance, what is described is a version of what [Rosenau \(2017\)](#) calls *fragmentation*, that is a disaggregation of state authority, and at the same time the assertion of that authority by different means – *destatisation/restatisation* - involving a new rationality and new modalities of governing through policy networks or heterarchies. It is a proliferation of governance and the emergence and development of a densely crowded but opaque field of heterarchical governance (see below). This is *hybrid governance*, and a new form of state – multidimensional, dynamic, ephemeral, also uneven and full of differences, overlaps and contradictions. In all of this it is no longer clear that the state is distinguishable from business or from the new generation of social capitalists and philanthropists who are eager to do statework and be part of the conversations of policy.

[Skelcher \(1998\)](#) argues these new social and political relationships of policy are also part of and contribute to other related features of the changing state. They contribute to what he calls ‘the appointed state’ (e.g. the Education Leadership Group) and what he also (2000) describes as the ‘congested state’. Between them, these descriptors capture both the proliferation and fragmented array of agencies and actors involved in local and regional governance and in the provision of public service. In a similar vein, [Keast, Mandell](#)

and Brown (2006, 27) argue that: 'This situation leads to governance complexity and what is contended to be a "crowded policy domain in which differing governance arrangements, policy prescriptions, participants and processes bump up against and even compete with each other to cause overlap and confusion...'. They go on to say that 'by bringing in a broad spectrum of community actors, often from outside of the conventional policy making arena ... the process became "messy" at times, often bordering on chaos'. Here we are researching in a dynamic emerging space, one that is still being fashioned, and constantly changing. New 'nodes' of 'creative capitalism' are contributing to a new social, political and educational reality in which the state is an initiator or facilitator of private sector participation on a global scale.

Therefore, it is important not to misrecognise what is happening here. This is not a 'hollowing out' of the state, rather it is a new modality of state power, agency and social action – a form of 'metagovernance' (Jessop, 2002, 242). Public services are delivered and 're-formed' through a mix of 'strategic alliances, joint working arrangements, networks, partnerships and many other forms of collaboration across sectoral and organisational boundaries' (Williams, 2002, 103). In general terms, this is the move towards a 'polycentric state' and 'a shift in the centre of gravity around which policy cycles move' (Jessop, 1998, 32).

Nonetheless, importantly, through the cacophony of discourses, interests, commitments and voices that characterises this dynamic emerging space, it is possible to distinguish a set of regularities in the epistemic terrain of education governance. Some distinctive refrains mark this cacophony. First and foremost, the questioning of the bureau-professional mode of government in education as ineffective in responding to the intertwining imperatives of constant change, adaptation, innovation, improvement and sustainability and the education equity agenda. Second, the equivalence between the problems of a failing education sector and the problems in the digitalisation of education, that is in the take up and use of EdTech solutions within education governance, teaching and learning. Third, there is a recombination of authoritative voices on education and education governance, with those of the representatives and ambitions of Edtech companies and investors. At the same time, within the same moves, digital and data experts as creative nodes that can contribute to the governing of education, the identification of the educational problems and the provision of 'disruptive' and innovative solutions, intervening in education systems and imagining education futures. Here digitalisation, the production and use of digital data and the introduction of technical devices of digital governance become the means to reinvent or 'revitalize' the regulatory pillars of the advanced liberal school and the triad curriculum/pedagogy/assessment and bureaucratic government and professional self-regulation and development (Hunter, 1996). As we have demonstrated in our analysis, here the state becomes an EdTech market midwife, creating the infrastructure within which the private sector can flourish, combining profit and humanitarianism, market-making and social responsibility, and fixing an otherwise disastrous situation for children, parents, and teachers (see also Williamson & Hogan, 2020).

As part of all of this, in the policy events we have described, big EduTech corporations such as Google and Microsoft, through strategically gifting governments, schools, teachers and students their platforms - G-Suite and 365 Education – an act of 'digital humanitarianism' (Meier, 2015), have secured the acceleration of the use of their products and services through various intermediaries (EdTechUK, IMS, Education Endowment Foundation, EEG) and they are now positioned firmly inside the education policy conversation in groups like the Education Leadership Group. At the same time, EdTech advocates and experts such as Matt Hood, Ian Bauckham and Ed Vainker, have been active in directly shaping the form of and enactment of education policies and filling the ontological and epistemic spaces opened by the COVID-19 crisis (ONA, EdTech50 etc.). This is bringing about the reimagining of public education through publicly supported best practices and privately provided platforms, moving (fast) fast policies on a national and global scale.

There is, however, a third change in the modalities of education government that we want to highlight. That is, that the extension of the state, as a set of practices for the management (here) of education, through networks, communities and diverse forms of expertise with all of its incoherence and redundancy is a substantively new mode and art of government, of self governance, government by recruitment, government in and through community and network relations – self government. The capabilities of enterprise and innovation designate an array of rules for the conduct of teachers' everyday existence: energy, initiative, ambition, calculation, and personal responsibility. Innovation (or problem solving – like ONA) is about taking control of our undertakings, defining our goals, and planning to achieve our needs through our own powers (Rose, 1996, 159). Passion, flexibility, voice, solution provision and vibrancy are not the antithesis of political power, but one of the objectives and instruments of modern mentalities for the conduct of conduct (Rose, 1996, 155). EdTech is very much a field of 'incitement, seduction, multiplication and expansion' – a 'regulated and polymorphous incitement'. At the same time, the partnerships of BigIT with these 'communities of practice' and governments bring about the growth of new markets that 'occur *in coordination* with governance' (Cone & Brøgger, 2020, 383).

COVID-19 and EdTech became conjoined as governments struggled to cope with the consequences of the virus. With a third of the global population under lockdown in the middle of the pandemic and the widespread closure of schools due to concerns about contagion, the supply of online teaching and learning activities have burgeoned. It is important to underline that while this may be a crisis for education it is an opportunity for business. Benjamin Vendrenne-Cloquet, CEO of EdTechX, speaking in his keynote presentation at the inaugural EdTechX digital summit noted that:

When the lockdown was announced, nation-by-nation, schools, colleges, universities and other education providers and businesses scrambled to implement tools that would enable remote working and learning. This is a major boom for the EdTech sector as, inevitably, technology usage has grown significantly and at a rate never seen before.

Since the start of the crisis:

Use of Google Classroom has grown 400%

Use of Byju's has grown 60%

Use of Duolingo has grown 60%

Use of Pearson has grown 44%²⁹

He went on to say: 'It looks like we've hit the worst of times, but, as often, there is another side to the coin'. We have begun to explore here that 'other side'. However, we are not suggesting that this was a unique moment or *event*, there is a now relatively long and complex history here of new modalities of governing, new forms of state, and of public service provision (see Ball & Junemann 2012). As we have emphasised, actors and organisations complicit in previous waves of public sector reform in England are playing a key role in this new iteration of innovation and reform, connecting, moulding, influencing and reshaping national and global orders, finding in the business of EdTech new dimensions and metaopportunities to reshape the governance of state education.

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²⁹ (<https://edtechnology.co.uk/covid-19/edtechx-covid-19-great-digital-leap-education-future-of-work/>).