

EdTech-mediated outsourcing and casualisation of academic labour

Toward a research agenda

Mariya Ivancheva and Aline Courtois

Mariya Ivancheva is a Senior Lecturer in the School of Education at the University of Strathclyde, UK.

Aline Courtois is a Senior Lecturer in the Department of Education at the University of Bath, UK.

COPYRIGHT

© 2024, Mariya Ivancheva and Aline Courtois. This is an open-access article distributed under the terms of the Creative Commons Attribution Licence (CC BY) 4.0 <https://creativecommons.org/licenses/by/4.0/>, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

ABSTRACT

Located at the intersection of scholarship on critical higher education (HE), the casualisation of the academic workforce and studies of digitalisation and online platforms in Higher Education (HE), this article examines the impact of online programme management companies (OPMs) on academic labour. OPMs partner with universities to provide core teaching functions while relying on the labour of increasingly casualised, often outsourced academics. We use a composite case study to illustrate how OPMs work in partnerships with universities to reorganise academic work. We discuss this model vis-à-vis the theoretical concepts in the digital HE, platform labour and sociology of work literature, elaborating on how the new forms of casualised labour in HE undergo real subsumption by technology-mediated programmes operated by OPMs. On this foundation, we discuss the possible implications and draw out questions for future research and trade union activity, two arenas where, we argue, more attention needs to be paid urgently to casualisation and the outsourcing of teaching through digital platform-mediated programmes.

KEY WORDS

Academic precarity; online programme management companies; EdTech; digitalisation; academic labour; casualisation; outsourcing

Introduction

The normalisation of insecure teaching-only contracts, performance regimes and task-based learning management systems have contributed to the emergence of new, starker forms of casualised labour in higher education (HE), which the COVID-19 pandemic has further amplified (Kınıkoğlu & Can, 2021; Watermeyer, Crick, Knight & Goodal, 2021). This trend was recently referred to as the ‘gig academy’ (Kezar et al., 2019; Martínez Guillem & Briziarelli, 2020) in reference to the ‘gig economy’, a term that describes a labour market characterised by short-term, on-call freelance work rather than by full-time salaried work. The emerging scholarship on educational technology (EdTech) and digital labour in academia analyses how new audit and surveillance regimes, the marketisation of HE and the rise of task-based research amplify exploitation and reshape academic identities (Hall, 2018; McKenzie, 2023; Ovetz, 2020). While research on digital education focuses primarily on the cognitive processes of technology-enhanced learning, this literature focuses on workers’ experiences. Yet, within this emerging critical literature, little attention has been paid to the outsourcing of teaching through public-private partnerships between universities and online programme management companies (OPMs).

This article argues that scholarship on contemporary ‘gig’ academia should be informed by work on platform labour to understand the ongoing transformations in the academic profession. It should pay specific attention to how digital platforms impact on academic labour and especially teaching. While universities use digital platforms in various ways, the present text focuses specifically on study programmes that are taught and/or managed through OPMs. Typically, these programmes are hosted by universities and lead to a university qualification, but they are staffed and run by university employees as well as outsourced workers contracted by the digital provider under various agreements (Cheslock, Kinser, Zipf & Ra, 2021). While most works discussing OPMs focus on the business model behind the agreement (Kornjenovic & Robertson, 2016; Ivancheva et al., 2020b), we are specifically interested in how these partnerships, in which large numbers of workers are hired by corporations ‘subcontracted’ by universities, contribute to the emergence of outsourced, digitalised and casualised labour in HE.

The article is located at the intersection of critical higher education studies and platform labour studies. As such, it seeks to make a theoretical and conceptual contribution by bringing together debates that currently mostly happen in parallel but separate spaces: discussions on EdTech and digitalisation in HE; work in the platform economy; and the technology-mediated transformation and subsumption of academic labour processes. So far, scholarly works on precarity have paid little attention to the technology-mediated transformation and outsourcing of labour processes. Authors working on ‘accelerated academia’ (Vostal, 2016), academic

alienation (Hall, 2018) and the subsumption of labour under capitalism (Szadkowski, 2016) focus mostly on research-related metrics. This neglect of teaching as an object of scholarly analysis ironically mirrors its devaluation within neoliberal academia. In addition, these works tend to focus on permanent academics' pleas for fundraising and publication time unshackled from teaching, thus largely ignoring casualisation and outsourcing as the very processes through which, we suggest, such an 'unshackling' of (predominantly senior, white, male) staff often takes place.

In what follows, we build on new works that link classical Marxist theory of formal and real subsumption of labour and feminist social reproduction theory (Harvie et al., 2022; Ivancheva & Garvey, 2022) to further develop this framework in the context of contemporary academic labour and apply it to the analysis of the impact of platform-mediated programmes. The article draws on our own professional observations and experiences with such models in the UK context (including programmes linked to UK universities that we experienced while located elsewhere) as a starting point to discuss the impact of these programmes on academic labour. It also draws on research on unbundled HE, showing that OPMs have similar agendas at universities across the English-speaking world (Ivancheva et al., 2020a). We deliberately blend the characteristics of these programmes: first, to ensure the anonymity of the programmes and of the institutions and workers associated with them; and, second, because we are interested in broad trends as they manifest across the sector rather than in less significant differences between institutions or products.

The article evolves as follows. We synthesise our observations in a composite case study, which opens the article. We then discuss the OPM–university partnership model vis-a-vis the theoretical concepts in the digital HE, platform labour and sociology of labour literature. In the third part of the article, we draw together these two discussions by elaborating on how the new forms of casualised labour in HE are accelerated and transformed further by technology-mediated programmes in the sector operated by OPMs. Before our concluding remarks, we discuss the possible implications and draw out some questions for future research that link casualisation and outsourcing of teaching labour through digital platform-mediated programmes.

EdTech and OPMs in HE

OPMs: a composite case study

On its website, a large corporation presents its services as a partner in the provision of online university postgraduate programmes. It offers its assistance not only in 'streamlining' the student application process, but also in marketing, creating, managing and staffing the programmes. In exchange for a substantial share of future student fees, the corporation conducts marketing and student recruitment (targeting uncharted international markets), manages the application process, designs and provides an infrastructure through which the university can deliver online versions of its credit-bearing short courses and postgraduate programmes, featuring attractive

on-demand presentation and video content. The package includes a platform where all student queries are triaged and redirected either to their university-based tutor or to an administrator working for the corporation as well as a dashboard for the programme manager to monitor tutors with a colour-coded system.

'In-house' academics are expected to work with the designer assigned by the corporation, who is in charge of making the course content fit into a specific model, template and aesthetic. The corporation also identifies which courses should move to online mode – typically, easily marketable courses that are not lab-based or require heavy infrastructure. It sets the number of modules, entry points and overall academic calendar, requiring the in-house academics to tailor their 'content' accordingly. Videos featuring university staff are filmed and edited professionally as part of the service. For their participation in the design, in-house faculty are allocated a set number of hours in their workload model – or paid a lump sum if they are casualised staff.

Once approved at the university level and running, the platform is operated by both in-house and outsourced staff, whom the corporation recruits internationally. The former are predominantly in charge of 'quality assurance' processes and do more examination- and assessment-related tasks, whereas the latter are more engaged in tuition and supervision, course administration, assessment and pastoral care. The targets of the OPM–university partnerships are located in various places around the world identified based on the corporation's market intelligence. Typically, they are in full-time work, and therefore need flexible learning options, but also have the purchasing power to access expensive programmes led (so it seems) by high-ranking universities. Spread across various time zones, they often have caring responsibilities which, added to their full-time work, create specific challenges that tend to make the task of supervising and supporting them labour-intensive.

Platform-hired academic staff, with the exception of the few in managerial positions, are usually paid a flat-rate fee per delivered content or attended student. Typically, they work from their own homes, using their own internet resources, utilities and spaces. Like many casualised staff, they are not unionised by the traditional academic unions and do not share spaces for professional development and discussion with the university faculty. The 'final product' advertised to prospective students will bear the globally prominent name of the client university and the students will remain unaware of the corporation's involvement in the provision of content and management of the course. They will also typically be siloed with limited access to facilities, resources and to the networks and mutual support that 'traditional' students and alumni enjoy.

This is one example of a partnership between an OPM and a university, drawn from a number of real-life examples known to the authors.¹ It describes a rather typical and ever-growing way in which core university work is outsourced to a digital platform.

1 This composite vignette allows us to maintain the anonymity of the universities, corporations and workers involved. Some cases are known to us through research we conducted and others through our professional experiences.

Situating OPMs in the global HE landscape

OPMs are a specific form of economic actor in the EdTech market that provides technology-mediated products and services, and whose activity is better understood in the context of broader structural changes reshaping HE. Under the impulse of privatisation and marketisation, HE institutions have become significant buyers of private products and services (Komljenovic, 2019). Within this landscape, EdTech is a multi-billion-dollar industry that draws large investors and is a key driver in the expansion of the global education industry (Mirrlees & Alvi, 2020). EdTech encompasses services as varied as in-classroom tablets, massive open online courses (MOOCs), digital curricula, content and/or testing packages, plagiarism software, discussion boards, teacher–parent communication apps, telepresence robots, different digital devices, learning management systems and many more.

A note of distinction is needed here. Digital platforms have come to prevail in many aspects of HE. Universities now outsource a range of tasks such as cleaning, catering, payroll, legal services, student catering, but also, to some extent, research and teaching via digital platforms. Platforms are everywhere in everyday academic work, even when teaching is done in-person. Products like Zoom, Google Classroom and Microsoft Teams are prime examples of digital education platforms and were given a significant boost during the COVID-19 pandemic as educators were forced to move online. Platforms such as Edmodo or ResearchFish are marketed to universities to help academics manage their administrative tasks or to collect, store and share with funders their research outputs and outcomes. Social media platforms are used by academics for their metrics required for research evaluation (Carrigan & Jordan, 2022). In addition, there are platforms that operate in the same way as those mediating ‘gig work’ in the food delivery or individual transport sectors, but specifically for academic labour. Through UpWork, for example, individual academics can be subcontracted to conduct task-based research; tutors can be sourced through platforms like PrepLy; research participants can be recruited and paid via Amazon Mechanical Turk (see McKenzie, 2023), while students can hire ghostwriters to complete their essays and dissertations through various platforms operating as ‘essay-’ or ‘diploma mills.’ Not only university managers but in some cases academic staff and also students outsource their work via digital apps, a trend most recently manifested in the quick uptake of ChatGPT.

However, in this article we are specifically focused on platform providers which manage platforms for online HE. The term online programme management (OPM) designates ‘infrastructure services provided by vendors to enable universities to deliver online and distance education courses’ (Williamson & Hogan, 2021:36). Vendors include large companies such as Pearson, Wiley, 2U, Coursera and many more. Their appeal resides in the fact that they provide startup capital and technological infrastructure upfront and assist universities in recruiting large numbers of fee-paying (most often international) students. Partnerships between OPMs and universities take a sizeable share of the EdTech market (HolonIQ, 2020). In 2019, OPMs included around 60 world players estimated at over \$5B (out of a \$30B+ global EdTech market) and were predicted to reach a value of \$7.7B by 2025. This prediction was revised to \$13.3B as a result of the pandemic outbreak (HolonIQ, 2019, 2021). There are, however, signs of a

possible inflexion in this growth: the combined revenue of the largest companies has not increased as much as predicted (32EDU, 2022). This is partly due to the fact that some large actors, such as Pearson, have sold out their OPM activity, but also that others, like EdX, have not experienced the anticipated deals with new owners, and some MOOC providers, like Coursera and Futurelearn, have shrunk due to significant financial losses (Hill, 2023; Lederman, 2023). The model is now perhaps reaching its limit as new regulations in the US, where most OPMs are registered, could force OPMs to become stand-alone providers rather than revenue-sharing partners (Hill, 2023), meaning they could no longer benefit from the prestige and intellectual resources of HE partners. The growth continues in other large markets such as Australia (Davies, 2023).

The specific models of operation that OPMs have introduced to HE have transformed it significantly. OPMs are distinct from other companies in the EdTech sector in three ways. One significant difference is that often they do not only provide the infrastructure but are also involved in shaping the content (Decuypere, Grimaldi & Landri, 2021). Workers hired by OPMs offer guidance and are sometimes involved in curriculum design and delivery of teaching content, student support and supervision, which are considered the 'core business' of universities. While in principle universities do not need OPMs to offer online courses, senior university managers – often in favour of EdTech-driven commercialisation – see OPMs as more agile, quicker to identify and target new 'atypical' online students, and better able to adapt to their needs in terms of asynchronous tuition and services in different times and locations, while saving universities the initial technical and staffing costs incurred (Ivancheva et al., 2020b; Cheslock, Kinser, Zipf & Ra, 2021:9–10).

A second difference is that, unlike other EdTech companies that sell their own products, or private HE providers that develop their own brand, OPMs use – or rather, hide behind – established brands of existing universities in order to sell their services or products. OPMs reportedly receive over 50% (Lieberman, 2017; Mosley, 2023) and up to 90% of course fee revenue (Newton, 2016; Hamilton et al., 2022) as well as gaining access to profitable big data gathered from the students in their programmes that they can repackage and sell for profit (Acosta, McCann & Palmer, 2020). In return, they offer some startup capital, risk absorption, platform, marketing and recruitment aid (Newton, 2015, 2016). Some corporations lock universities into monopoly-like agreements too costly for universities to leave, thus ensuring long-term profit (Cheslock, Kinser, Zipf & Ra 2021).

A third significant difference, and the one that preoccupies us specifically here, is linked to the role of OPMs in the unbundling, and resulting acceleration, of technologically mediated outsourcing and casualisation in HE. Unbundling is 'the disaggregation of educational provision and its delivery, often via digital technologies' (Ivancheva et al., 2020b:608). On a basic level, unbundling consists of taking apart the components of a degree, not only in terms of offering separate *a la carte* modules but by separating out tasks constitutive of teaching and allocating them to different workers. For example, one person might provide the outline for a lecture; another would design slides or other material based on the content; and the lecture would be delivered by another worker, or more typically, multiple workers. These can be designated as tutors rather than lecturers and paid for the task of delivering this content only. The presence

of OPMs is not a necessary condition of unbundling, as universities can unbundle and re-bundle content themselves or with the help of other partners (professional bodies, NGOs, specialised further or higher education institutions). Yet, in OPM–university partnerships, content is routinely unbundled for commercial purposes with the help of digital technologies. In parallel, traditional academic roles are unbundled through the division of labour and the emergence of deskilled professional categories with less professional autonomy, prestige or pay (MacFarlane, 2011).

Initially, unbundling was celebrated by those who understood it as led by the ideal of the commons (Mansell, 2017) or the logic of social relevance in technological progress, rather than by a market-led logic and imaginary (Ivancheva et al., 2020b). On the surface, digital technologies could uphold the tradition of distance education to offer affordable and flexible options to ‘atypical’ students who could not pursue full-time residential degrees: women, people with caring responsibilities or disabilities, and full-time workers. However, research shows that these programmes have in fact contributed to the transformation of universities into providers servicing specific market actors: unbundled services and programmes target those with lower income and access, while elite residential degrees and the ‘student experience’ remain an exclusive privilege (Ivancheva et al., 2020b). What remains outside the focus of most studies of unbundling is its role in the ongoing transformation of academic work and its shift towards the model of platform and gig work.

The technology-mediated transformation of academic labour

Platform (academic) labour?

Recent works on platforms and labour automation and their role in the gig economy (Srnicek, 2016; Neufeind, O’Reilly, & Ranft, 2018; Huws, 2019) are useful for analysing the transformation of academic work under the influence of OPMs. According to Nick Srnicek (2016), platforms are extremely profitable because their intermediary digital infrastructures enable value generation from users’ activities as well as the extraction and procurement of user data. Platforms typically define their workers as independent contractors. In some cases, workers are cast as users and are not remunerated, as the platform presents itself as a mere facilitator between providers of content or services and their clients (Abdelnour & Méda, 2019). The burden of risk and the costs associated with training or equipment are thus passed on to workers, while the corporation saves by not providing for annual or sick leave, insurance or pensions and has no obligation to provide full-time or continuous work.

The ‘gig economy’ is not new: Piecework and other forms of task-based work were dominant before the formal employment relationship became the norm in Global North countries (Millar, 2017). In fact, the mechanisms of exploitation manifest in platform work were largely in place before digitalisation and are not imputable to technological change alone (Stanford, 2017). Thus, in the platform economy as a sector, emphasis on technological and organisational innovation masks processes of labour

fragmentation and individualisation (Heiland, 2020), the human labour and decisions behind algorithmic management. The concentration of power in the hands of a small number of very large transnational companies enables new forms of commodification, surveillance, control and exploitation of workers as they expend their own time, resources and networks in the labour process while being under the constant monitoring and control of algorithms (Srniczek, 2016; Schor et al. 2020; Haidar & Keune, 2021). Transnational corporations move across jurisdictions easily and avail themselves of free trade agreements to lower costs and protections, increase flexibility and control and subsume labour through new technologies, including, as discussed below, in HE.

At the same time, the development of platform-mediated 'gig work' is sometimes presented as a positive shift, for example, a flexible option enthusiastically chosen by those who find salaried work uninspiring and unrewarding and who actively choose a frugal, precarious but creative life over a secure one (e.g. Threadgold, 2018; Schor et al., 2020). In the same way as the 'sharing economy' with which it overlaps, platform work is thus connected to the formation of new subjectivities that embrace and re-brand precarity as something desirable (Harris, 2020). Under the guise of the entrepreneurial self, and with the help of a transnationally porous neoliberal regulatory environment, labour platforms are merely capital's latest attempt to increase profit and control over labour (Huws, 2017; Haidar & Keune, 2021:3; Orr et al., 2022). 'Gig' or platform labour increases the precarity of the most vulnerable workers, in particular those who are migrants, and those who rely on such work as their main income (Orr et al., 2022). Even where it appears to be chosen for its flexibility and in the context of generating additional income, typically the more privileged workers (male, urban, middle-class) benefit from it more (Abdelnour & Méda, 2019).

While the most commonly discussed forms of platform-mediated work are delivery, transport, shopping and cleaning services such as Deliveroo, Uber or Shopper where a digital application-integrated algorithm connects users and service providers, not all platform-related work entails the use of a platform to allocate labour; and business models vary widely across the sector. In the realm of micro-tasking in Amazon Mechanical Turk and Clickworker, or platform-mediated work on larger creative projects via UpWork or PrepLy, the service provided by the platform resembles a more traditional and self-managed job search engine, but it extracts 'rent' from both workers and clients and penalises communication undercutting the platform mediation. On this spectrum, OPMs do not recruit and deploy outsourced labour through an algorithmic allocation or app, but take a more traditional role as a subcontractor that on its end contracts workers as part of the package of 'platform management' it offers as a service to its main customer – in this instance, a university. It is not the platform then, but the OPM or university-hired administrative staff that connect 'consumers' (students) and 'producers' (academics) of services (course design, tuition, supervision, assessment or pastoral care). Still, the flat-rate/zero-hour form of payment, temporary nature of the contract and the ambiguous employment relationship (is the work conducted for the university or the OPM?) make the work of outsourced faculty as insecure and unpredictable as that of many platform workers. Another similarity between the platform and OPM-mediated labour is the splitting of tasks and deskilling of work:

a new labour regime under which what used to be a core profession integrating research, teaching and administration is now split into multiple low-paid jobs, or even tasks. It is here precisely that this process can be understood as a form of real subsumption of labour under capital, which we turn to next.

Technologically mediated formal and real subsumption of academic labour

The transformation of labour in HE can be discussed as part of the process of formal and real subsumption of productive and reproductive work: a process to which outsourcing contributes as a new frontier of technology-mediated subsumption.

Scholars of HE and labour have started to discuss the processes of formal and real subsumption in academic labour (Szadkowski, 2016; Harvie et al., 2022; Ivancheva and Garvey, 2022). Subsumption designates the process described by Karl Marx as the subordination of labour to the valorisation of capital, that is the creation of surplus value from labour (Marx, 1864). Formal subsumption begins when pre- or non-capitalist labour forms are attributed to exchange value, namely when they are dis-embedded from the logic of non-economic institutions, and start generating surplus value. Examples include the peasant entering an economic relationship of day labourer with the farmer, the craftsman becoming a handyman on wage labour, or the freed slave being employed by their former owner. In this, the labour process remains the same while the relation of production is changed through its monetisation. However, this relationship also leads to the growing accumulation of surplus capital. Technology and an ever-increasing number of workers are used to intensify formally subsumed labour and extract maximum labour at minimum cost (Marx, 1864). Real subsumption, then, takes place when advanced technological developments lead to the division of labour within larger groups working for the same owner, and transform the very nature of the labour process and the social conditions of formally subsumed labour. Labour is turned into purely capitalist for-profit activity, but also changes its appearance: from the productive power of the worker to the productive power of capital; it is 'objectified' and 'personified' in the abstraction of capital (Marx, 1864). This process does not simply lead to capital accumulation *ad infinitum*: real subsumption massifies production and causes profit to fall, engendering resistance among alienated workers, but also leading to capital flight into new production sectors.

While Szadkowski (2016) explains these two processes in relation to research, namely the *productive* function of academic labour, Ivancheva and Garvey (2022) advocate for a greater focus on the *social reproduction* function of HE, that is to say teaching and related tasks. They insist that this is where real subsumption and transformation of the academic profession is currently taking place, drawing on social reproduction theory and, particularly, on feminist critiques of classical Marxism. In classical Marxism, labour-power is understood as reproduced by means of subsistence alone, neglecting the care labour needed to produce, feed, dress and socially maintain the worker in their community (Federici, 2018). This is relevant to the reproduction of academic communities, which does not rely solely on research, but also on teaching. This includes not only classroom instruction but also pastoral care and administrative support, postgraduate supervision, tasks which disproportionately fall on the shoulders

of women and those from minority backgrounds (O’Keefe & Courtois, 2019; Sümer & Eslen-Ziya, 2023).

Following Harvie and colleagues (2022), Ivancheva and Garvey (2022) warn against the hierarchical division of research and teaching constitutive of processes of rampant transformation of public HE. This process has been widely discussed in the critical HE literature as connected to New Public Management (NPM) and the ‘optimisation’ of the labour force through cost-cutting and the separation of research and teaching (e.g. Tight, 2019). Research is now largely dependent on competitive bids for external funding that only permanent staff are fully eligible for. While research-only precarious staff are hired to co-produce research, low-cost teaching-only staff are brought in to replace ‘core’ academics perpetually busy in fundraising and managing big grants (Harvie et al., 2022). Thus, NPM primed the sector for a significant segment of its activities – teaching – to be outsourced to and taken over by private companies such as OPMs.

With content put online and ‘facilitated’ by workers often trained to a postgraduate or even post-PhD level, university–OPM partnerships use two types of unpaid or poorly paid labour. On the one hand, they use precarious university-hired academics whose workloads are intensified and extended all at once to absorb a second shift of online teaching, often with no additional support or remuneration. On the other hand, they use precarious, de-professionalised, and increasingly deregulated and poorly paid contract labour by OPM-hired outsourced academics. The job specifications in both cases include new titles such as ‘content curators’, ‘forum managers’, ‘research supervisors’, ‘knowledge officers’ and ‘online support officers’. These job descriptions proliferate, marking these new jobs as different from the more traditional academic positions. In practice, the roles may cover broad or narrow ranges of tasks and functions necessary to the smooth operation of these large commercial programmes and to the flow of cognitive capital, while workers are ever-more invisible, fragmented and isolated. As universities hire fewer and fewer permanent academics, casualised academics have little choice but to take these ‘unbundled’ teaching-only positions inside and outside universities.

The really subsumed precarious workforce

In the UK, precarious workers represent more than 50% of the academic workforce, with particularly strong concentrations at research-intensive ‘prestigious’ institutions (UCU, 2019, 2020). In 2020–21, this amounted to a precarious workforce of nearly 70,000 staff (UCU, 2020). Poor mental health due to insecure contracts was reported by 71% and 83% experienced hardships buying a house or planning a family (UCU, 2019). Part-time and hourly paid teaching-only staff do a large part of their work without pay. This also has consequences, especially for early-career researchers, and in particular those on teaching-only contracts, who are not entitled to any research allowance and are further penalised by their status when it comes to applying for permanent positions. Large-scale studies of PhD experiences have been rare, but a report from a decade ago indicated worrying trends: four out of five PhD graduates in the UK were employed on an open-ended contract seven to nine years after graduation; one out of four had to cope with one or more periods of unemployment half a year after graduating with a doctoral degree and only half were able to stay working in HE (Diamond et al., 2014).

Casualisation is profoundly gendered and racialised, with Black, Asian and minority ethnic people, women, people with caring responsibilities and those from low-income families overrepresented in precarious positions (AdvanceHE, 2018; Arday, 2022). An expectation of teaching and pastoral care as 'free labour' (Terranova, 2000) is naturalised as a 'gift' to students. It draws on a double 'care ceiling' (Lynch et al., 2020) exploiting the necessity to care for one's own family as well as for students and colleagues. The imperative to care (O'Brien, 2007), increasingly extensified through technological mediation to cut costs and outsource teaching into unprotected spaces, is juxtaposed to the persistent norm of global hegemonic masculinity for 'star' academics. The norm (sometimes embodied by women) is often that of 'careless' individuals, available to work 24/7 or to outsource work to usually female partners or paid carers, and to be available to move smoothly across the globe to avail of networking or funding opportunities (Ivancheva, Lynch & Keating, 2019; Sautier, 2021; Courtois & Sautier, 2022). Those who pick up the poorly remunerated and less-recognised bits of their work are usually on precarious contracts; precarious, that is, both in terms of contractual relations (fixed-term, part-time, insecure contracts) and in experiences of 'existential and structural uncertainty' (Butler, 2009), lacking both in security of work and in fairness in the redistribution, recognition and representation of financial and symbolic capital, which their labour status also entails (Standing, 2011). Precarity is hereby characterised by accelerated forms of professional invisibility and lack of clear promotion and recognition tracks, as well as vulnerability to different forms of abuse of power and changes of structural conditions, but also lack of agency to plan the future and a deficit of time and space for personal and professional development, and for planning and controlling their life cycles in predictable ways (UCU, 2020). In this, as in platform labour, behind discussions of flexibility and freedom, precarity means coercion by market forces.

In a scenario where research is privileged, casualised teaching, administration and pastoral care are used as a cheap alternative to the under-recognised and under-remunerated 'feminine' tasks in academia. In research projects this is particularly visible through the 'buy-out' process mentioned above. Tutorials, learning design, assessment, grading, supervision and other teaching-related tasks are further outsourced and redeployed from those on permanent academic contracts to teaching-only staff on lower pay. Those doing this teaching work while employed or contracted by OPMs typically do so outside an academic role. OPMs enable the acceleration of the process whereby teaching is further separated out and outsourced as a component of academic work that can be done by faculty hired outside universities and under ever-more elusive contractual descriptions. Such forms of technologically mediated deskilling and de-professionalisation take apart the core functions of academics: research ceases to be the occupation even of 'research supervisors' and some teaching-related tasks become part of 'student experience and wellbeing' offered as a service rather than part of a more integrated learning process. When it comes to workers in these platform-mediated programmes, we can see *par excellence* how real subsumption is complete, and this allows the 'platform' or 'owner' to subsume fully the labour processes as part of the productive power of capital rather than of academic workers.

Toward a research agenda

Online learning, initially praised for its affordability, flexibility and fitness to individual student needs (Alevizou, 2015), has garnered increasing criticism. Scholars have noted that commercially driven forms of online education promote profound transformations in the education process that affect the very nature of teaching, and thus its real subsumption. A first aspect of this transformation is the denial of academic expertise: platform constructors, and not faculty, decide which courses should be prioritised and what the entry points and course schedules should be; they also influence or even lead decisions about entry requirements, course content, modes of delivery and evaluation. Ultimately, their approach to what constitutes relevant or good education shapes what is being offered (Decuyper, Grimaldi & Landri, 2021). This transformation is pushed further by the pedagogical annihilation of space and time with learners promised unlimited on-demand content accessible anytime from anywhere, as well as an unfettered flow of knowledge as pure information content with no friction, ambiguities or open questions. This contributes to the standardisation of content and disembodiment and deskilling of teaching (Martínez Guillem & Brizarielli, 2020). It also feeds into a vision of HE as a set of targeted 'services' and microcredentials, 'nano-degrees' and 'bite-size content' that 'student-consumers' can mix and match according to job market demands (Newton, 2015, 2016). OPMs thus facilitate the unbundling of HE. This 'curated' HE version lends itself to new surveillance mechanisms and algorithmic management (Ovets, 2020) of both learners (through learning analytics) and faculty (through the expectations of 24/7 online availability, pre-curated slides and recorded lectures in which employers hold the intellectual property rights). Another aspect is the push toward home-based work, invisibilising precarious teaching staff and asking them to use their own devices, spaces and facilities, which is a cost-cutting measure for their employers in the public and private sectors alike (Adams Moon, 2017). In some cases, this may even support the denial of employee status. What never changes, though, is the gendered imperative to care for students with ever-more complex needs within online interfaces without support for new pastoral care skills.

In this context, finally, using the brands of research universities to generate fee income, university–EdTech partnerships are opening a new page in the de-professionalisation and fragmentation of academic labour already noted a decade ago by authors such as MacFarlane (2011). The pandemic was feared by some (Ivancheva, 2020a) and celebrated by others (HolonIQ, 2020) as an opportunity for OPMs to double their market share and annual revenue. While this has so far not happened, the acceleration of casualisation and outsourcing is underway. The tendency of universities to casualise their workforce and the way OPMs operate may mutually reinforce each other. Some UK universities have conducted large-scale redundancy plans (Sloane, 2023), thus creating a need for more in-house or outsourced casual staff to cover teaching, while leaving workers with little choice but to seek employment elsewhere – increasing the pool of qualified academics that OPMs can tap into.

In view of these trends, it is important to study how these new divisions will play out, both inside and outside the academic setting, in ways that relate both to the organisation of academic labour and to the new horizons of extraction that OPMs and

other private companies engage in. This implies a fundamental change in what we, as researchers of HE, understand HE and the academic profession to be. Limiting our investigations to those employed by universities, or to those physically located in these workplaces, will not allow us to understand and challenge the transformations under way. Understanding academic work as subject to de-professionalisation, casualisation and outsourcing, as in other sectors such as platform work, is imperative to understand subsumption and move research forward.

Several dimensions and potential angles of analysis are of interest for future research. First, both unbundling and casualisation – two often interconnected phenomena – fragment the academic profession and what it means to be an academic and to do academic work (MacFarlane, 2011). One of the ways this happens relates to the physical, legal, administrative and symbolic spaces in which labour is conducted. OPMs and platforms have the potential to accelerate, amplify and open uncharted territories for these transformations. This leads to questions such as: What is the status and professional identity of those conducting forms of academic work outside the physical and/or legal/administrative entities of universities? How are they affected by crossing the boundary between public and private employment (or contracting) or working in a liminal space between the two? How do OPMs and platforms impact the ability of universities to outsource work internationally and what are the implications for existing geopolitical hierarchies? A second set of questions relates to the issue of time: What role do OPMs and platforms play in changes in the pace of work? Do they encourage workers to parcel out their time rather than approaching academic work holistically? A third area for research is that of compliance, resistance and solidarity. Are conditions already familiar to casualised and/or outsourced faculty becoming a norm for most faculty (work from home; hyper-flexible schedules; invisible, un(der)paid and un(der) recognised work; inadequate access to benefits, facilities, systems of support and representation)? Is there potential for mutual recognition, solidarity and resistance or deepened divisions? How can academic unions reach out to outsourced workers?

These research questions also come with conceptual and methodological challenges: How do we identify and reach these workers? Precarious academics experience time poverty and participating in other academics' research constitutes unpaid labour, ultimately for the benefit of the lead researchers (O'Keefe & Courtois, forthcoming; Papoulias & Callard, 2022); and those working through platforms have even less time to spare (McKenzie, 2023). A fourth question is, how can we research these workers in a way that does not further their exploitation?

Conclusion

Despite the rise of OPMs, public-private partnerships and EdTech in general, on the one hand, and that of casualisation of academic labour, on the other, the question of how outsourcing through OPMs affects casualisation and extracts profit from the financial and human resources of publicly funded universities is surprisingly under-researched. This article set out to examine the conditions and implications of the expansion of the OPM sector in HE for academic labour. In order to do this, we started

by weaving together several real-life experiences of the reorganisation of academic work within or through OPMs. From there, we unravelled the many ways in which these technology-mediated transformations of labour dovetail with and also amplify processes of casualisation and deskilling that are underway. We found Marx's theory of subsumption, combined with feminist social reproduction theory, useful in framing these issues. Combining these and pointing the research lens toward the digital platform management corporations employing and subcontracting outsourced academics and/or mediating and reshaping the labour of in-house academic staff would allow the in-depth exploration of the degrees of autonomy and network effects of OPM companies and further forms of technology-enabled outsourcing in academia.

Such a project is long overdue but also a difficult endeavour, even for academics on secure contracts working in OPM–university-managed programmes and departments where such programmes exist: the stakes are high for OPMs to continue hiding behind brands and for university management to continue the outsourcing while making resistance ever-more difficult. This is precisely why unions should be especially alert to these developments. Unless the new forms of reorganisation of academic labour through technology-mediated unbundling and outsourcing – within or outside universities – is taken into consideration by academic trade unions, this new 'generation' of precarious workers will present a new challenge to mobilising and collective bargaining in HE, as their conditions make resistance ever-more difficult. In 2021, echoing similar decisions in relation to platform workers, an Employment Tribunal ruled that the status of outsourced lecturers at Goldsmith should be changed from 'independent contractor' to 'worker'; an important victory, which will hopefully set a precedent (Leigh Day Law Firm, 2021). Yet, beyond such victories, a not-too-unreal dystopian scenario has seen many lose their jobs at less globally visible or desirable institutions – Australia being a case in point (Davies, 2023) – and find new work under ever-more precarious outsourced or 'independently contracted' status.

At this juncture, the push to online course delivery at the onset of the pandemic exacerbated a tendency present before its outbreak: a tendency that needs to become a central arena of action research and union struggle. Beyond rigorous academic research and workers' inquiry among OPM-hired faculty, now more than ever a sector-level audit and regulation of university–OPM contracts and EdTech procurement is due, paying particular attention to academic labour used by EdTech corporations. While trying to stop layoffs, university-hired academics and academic trade unions will also need to make themselves aware of and available to academic workers in the outsourced programmes, with the fight to insource teaching staff as a possible horizon.

REFERENCES

- 32EDU (2022) 'The updated OPM market landscape', *Thirty Two Edu*. Accessed April, 12, 2023 from <https://blog.thirtytwoedu.com/the-updated-opm-market-landscape-40f36182a1c8>
- Abdelnour S. & D. Méda (Eds.) (2019) *Les nouveaux travailleurs des applis. La vie des idées*. Paris: la vie des idées.fr PUF.
- Acosta, A., C. McCann & I. Palmer (2020) 'Considering an online program management (OPM) contract', *New America*. Accessed April, 11, 2023 from <http://newamerica.org/education-policy/reports/considering-online-program-management-opm-contract/>

- Adams Moon, P. (2017) 'Coming to campus to teach online', *Inside Higher Ed*. Accessed April, 12, 2023 from <https://www.insidehighered.com/views/2017/10/03/why-online-professors-should-be-campus-essay>
- AdvanceHE. (2018) 'Equality in higher education: statistical report 2018'. Accessed April, 12, 2023 from <https://www.advance-he.ac.uk/knowledge-hub/equality-higher-education-statistical-report-2018>
- Alevisou, G. (2015) 'From OER to MOO Cs: critical perspectives on the historical mediation trajectories of open education', *International Journal of Media & Cultural Politics*, 11 (2):203–24. doi: 10.1386/macp.11.2.203_1
- Arday J. (2022) "'More to prove and more to lose': race, racism and precarious employment in higher education", *British Journal of Sociology of Education* 43 (4):513–33. doi: 10.1080/01425692.2022.2074375
- Butler, J. (2009) 'Performativity, precarity, and sexual policies', *AIBR, Revista de Antropologia Iberoamericana*, 4 (3):321–36. doi: 10.11156/aibr.040305
- Carrigan, M. & K. Jordan (2022) 'Platforms and Institutions in the post-pandemic university: a case study of social media and the impact agenda', *Postdigital Science and Education*, 4(2):354–72. doi: 10.1007/s42438-021-00269-x
- Cheslock, J.J., K. Kinser, S.T. Zipf & E. Ra (2021) 'Examining the OPM: form, function, and policy implications', *EdArXiv*. doi: 10.35542/osf.io/py3sz
- Courtois, A. & T. O'Keefe (2020). 'Who does the housework of the university during a pandemic?' *Gender & Society Blog*. Accessed April, 11, 2023 from <https://researchportal.bath.ac.uk/en/publications/who-does-the-housework-of-the-university-during-a-pandemic-the-im>
- Courtois, A. & M. Sautier (2022) 'Academic Brexodus? Brexit and the dynamics of mobility and immobility among the precarious research workforce', *British Journal of Sociology of Education*, 43 (4):639–57. doi: 10.1080/01425692.2022.2042195
- Davies, A. (2023) 'Why Australian universities are outsourcing courses to for-profit providers', *The Guardian*, 7 March. Accessed April, 12, 2023 from <https://www.theguardian.com/australia-news/2023/mar/07/why-more-australian-universities-are-outsourcing-courses-to-for-profit-providers> (accessed 11 April 2023)
- Decuyper, M., E. Grimaldi, & P. Landri (2021) 'Introduction: critical studies of digital education platforms', *Critical Studies in Education* 62 (1):1–16. doi: 10.1080/17508487.2020.1866050.
- Diamond, A., Charlie Ball, T. Vorley, T. Hughes, R. Moreton, P. Howe & T. Nethwani (2014) 'The impact of doctoral careers final report', *CFE Research*. Accessed April, 11, 2023 from <https://www.ncub.co.uk/wp-content/uploads/2015/01/Impact-1.pdf>
- Federici, S. (2018) 'Marx and feminism', *TripleC: Communication, Capitalism & Critique*, 16 (2):468–75. doi: 10.31269/triplec.v16i2.1004
- Haidar, J., & M. Keune (Eds.). (2021) *Work And Labour Relations in Global Platform Capitalism*. Cheltenham: Edward Elgar Publishing.
- Hall, R. (2018) *The Alienated Academic*. Berlin: Springer Berlin Heidelberg.
- Hamilton, L.T., H. Daniels, C.M. Smith & C. Eaton (2022) 'The private side of public universities: third-party providers and platform capitalism'. Berkeley Center for Studies in Higher Education, *Occasional Paper CHHE*, 3.22 Accessed April, 12, 2023 from <https://escholarship.org/uc/item/7p0114s8>
- Harris E. (2020) *Rebranding Precarity: Pop-Up Culture as the Seductive New Normal*. London: Zed Books. doi: 10.5040/9781350225619
- Harvie, D., M.P. Ivancheva & R. Ovetz (2022) 'The political economy of the public university'. In A. Maisuria (Ed.), *Encyclopaedia of Marxism and Education*. Leiden: Brill:606–23.
- Heiland, H. (2020) *Workers' Voice in Platform Labour*. Berlin: Hans-Böckler-Stiftung Accessed April 11, 2023 from <https://www.econstor.eu/bitstream/10419/225444/1/wsi-study-21.pdf>
- Hill, P. (2023) 'OPM market landscape and dynamics: spring 2023 updates', *Phil Hill and Associates*. Accessed April, 12, 2023 from <https://philhillaa.com/onedtech/opm-market-landscape-and-dynamics-spring-2023-updates>
- HolonIQ. (2019) 'The anatomy of an OPM and a \$7.7B market in 2025', *HolonIQ*. Accessed April 12, 2023 from <https://www.holoniq.com/news/anatomy-of-an-opm/>

- HolonIQ. (2020). \$74B Online Degree Market in 2025, up from \$36B in 2019. Accessed April 12, 2023 from <https://www.holoniq.com/notes/74b-online-degree-market-in-2025-up-from-36b-in-2019>
- Huws, U. (2017) *The Future of Work: Neither Utopias nor Dystopias but New Fields of Accumulation and Struggle*. Transform. Accessed April, 11, 2023 from <https://www.transform-network.net/en/publications/yearbook/overview/article/yearbook-2017/the-future-of-work-neither-utopias-nor-dystopias-but-new-fields-of-accumulation-and-struggle/>
- Huws, U. (2019). *Labour in Contemporary Capitalism: What Next?* London: Palgrave Macmillan UK.
- Ivancheva, M., A. Courtois & C. Guzmán-Valenzuela (2020a) 'Is the move online adding to casualisation of HE work?', *University World News*. Accessed April, 11, 2023 from <https://www.universityworldnews.com/post.php?story=20201104075521216>
- Ivancheva, M., R. Swartz, N.P. Morris, S. Walji, B. Swinnerton, T. Coop, & L. Czerniewicz (2020b). Conflicting logics of online higher education. *British Journal of Sociology of Education*, 41(5): 608–25. doi: 10.1080/01425692.2020.1784707
- Ivancheva, M. & B. Garvey (2022) 'Putting the university to work: the subsumption of academic labour in UK's shift to digital higher education', *New Technology, Work and Employment*, 37 (3):381–97. doi: 10.1111/ntwe.12237
- Ivancheva, M., K. Lynch & K. Keating (2019) 'Precarity, gender and care in the neoliberal academy', *Gender, Work & Organization*, 26 (4):448–62. doi: 10.1111/gwao.12350
- Kınıkoğlu, Canan Neşe & Aysegül Can (2021) 'Negotiating the different degrees of precarity in the UK academia during the COVID-19 pandemic', *European Societies*, 23 (sup1):S817–S830. doi: 10.1080/14616696.2020.1839670.
- Kezar, A.J., T. DePaola, & D.T. Scott (2019) *The Gig Academy: Mapping Labor in the Neoliberal University*. Baltimore: Johns Hopkins University Press.
- Komljenovic J. (2019) 'Making higher education markets: trust-building strategies of private companies to enter the public sector', *Higher Education*, 78 (1):51–66. doi: 10.1007/s10734-018-0330-6
- Komljenovic, J. & S.L. Robertson (2016) 'The dynamics of 'market-making' in higher education', *Journal of Education Policy*, 31 (5), Article 5. doi: 10.1080/02680939.2016.1157732
- Lederman, D. (2023) 'Pearson, once a market leader, leaves online services business', *Inside Higher Ed*. Accessed April, 11, 2023 from <https://www.insidehighered.com/news/2023/03/22/pearson-once-leader-sells-its-online-services-business>
- Leigh Day Law Firm (2021) 'University lecturers win their claim for worker status against Goldsmiths University of London'. Accessed April, 11, 2023 from <https://www.leighday.co.uk/news/news/2021-news/university-lecturers-win-their-claim-for-worker-status-against-goldsmiths-university-of-london/>
- Lieberman, M. (2017) 'Competing models among OPM providers', *Inside Higher Ed*. Accessed April, 11, 2023 from <https://www.insidehighered.com/digital-learning/article/2017/10/25/opms-fee-service-growing-revenue-share-models-dominate>
- Lynch, K., M. Ivancheva, M. O'Flynn, K. Keating & M. O'Connor (2020) 'The care ceiling in higher education', *Irish Educational Studies*, 39 (2):157–74. doi: 10.1080/03323315.2020.1734044
- Macfarlane, B. (2011) 'The morphing of academic practice: unbundling and the rise of the para-academic', *Higher Education Quarterly*, 65 (1):59–73. doi: 10.1111/j.1468-2273.2010.00467.x
- Mansell, R. (2017) 'Imaginaries of the Digital: ambiguity, power and the question of agency', *Communiquer. Revue de Communication Sociale et Publique*, 20, Article 20. doi: 10.4000/communiquer.2261
- Martínez Guillem, S. & M. Briziarelli (2020) 'Against gig academia: connectivity, disembodiment, and struggle in online education', *Communication Education*, 69 (3):356–72. doi: 10.1080/03634523.2020.1769848
- Marx, K. (1864) 'Economic manuscripts: Chapter 2: Results of the direct production process. *Marxists.Org*. Accessed April, 11, 2023 from <https://www.marxists.org/archive/marx/works/1864/economic/ch02a.htm>

- McKenzie, M.D.J. (2023) 'Precarious Participants, online labour platforms and the academic mode of production: examining gified research participation', *Critical Sociology*, doi: 10.1177/08969205231180384.
- Millar K.M. (2017) 'Toward a critical politics of precarity', *Sociology Compass*, 11 (6):e12483. doi: 10.1111/soc4.12483.
- Mirrlees, T. & S. Alvi (2020) *EdTech Inc: Selling, Automating and Globalizing Higher Education in the Digital Age*. London: Routledge.
- Mosley, N. (2023) 'What's the current state of OPM and UK university partnerships?', *Neil Mosley Consulting*. Accessed April, 11, 2023 from <https://www.neilmosley.com/blog/whats-the-current-state-of-opm-and-uk-university-partnerships-1>
- Neufeind, M., J. O'Reilly, & F. Ranft (Eds.). (2018). *Work in the Digital Age: Challenges of the Fourth Industrial Revolution*. NY & London: Rowman & Littlefield.
- Newton, D. (2015) 'Higher education is not a mixtape', *The Atlantic*. Accessed April 11, 2023 from <https://www.theatlantic.com/education/archive/2015/01/higher-education-is-not-a-mixtape/384845/>
- Newton, D. (2016) 'How Five companies are gaining millions in profit off education at nonprofit schools', *The Atlantic*. Accessed April, 11, 2023 from <https://www.theatlantic.com/education/archive/2016/06/for-profit-companies-nonprofit-colleges/485930/>
- O'Brien, M. (2007) 'Mothers' emotional care work in education and its moral imperative', *Gender and Education*, 19 (2):159–77 doi: 10.1080/09540250601165938
- O'Keefe, T. & A. Courtois (2019) "'Not one of the family': gender and precarious work in the neoliberal university", *Gender, Work & Organization*, 26 (4):463–79. doi: 10.1111/gwao.12346
- O'Keefe, T. & A. Courtois (forthcoming) 'Holding ourselves to account: the precarity dividend and the ethics of researching academic precarity', *The Sociological Review*.
- Orr, W., K. Henne, A. Lee J.A. Harb & F. Carniero Alphonso (2022) 'Necrocapitalism in the gig economy: the case of platform food couriers in Australia', *Antipode*: 55 (1):200–21 doi: 10.1111/anti.12877
- Ovetz, R. (2020) 'The algorithmic university: on-line education, learning management systems, and the struggle over academic labor', *Critical Sociology*, 47 (7–8):1065–84 doi: 10.1177/0896920520948931
- Papoulias, S. & F. Callard (2022) 'Material and epistemic precarity: it's time to talk about labour exploitation in mental health research', *Social Science & Medicine*, 306:115102. doi: 10.1016/j.socscimed.2022.115102
- Sautier M. (2021) 'Move or perish? Sticky mobilities in the Swiss academic context', *Higher Education*, 82 (4):799–822. doi: 10.1007/s10734-021-00722-7.
- Schor J.B., W. Attwood-Charles, M. Cansoy, I. Ladegaard & R. Wengronowitz' (2020) 'Dependence and precarity in the platform economy', *Theory and Society*, 49 (5):833–61. doi: 10.1007/s11186-020-09408-y.
- Sloane, P. (2023) 'A 10 per cent UK pay rise would risk the livelihoods of many post-92 staff', *Times Higher Education* (THE). Accessed April, 11, 2023 from <https://www.timeshighereducation.com/blog/10-cent-uk-pay-rise-would-risk-livelihoods-many-post-92-staff>
- Srnicek, N. (2016) *Platform Capitalism*. London: Polity Press.
- Standing, G. (2011) *The Precariat: The New Dangerous Class*. London: Bloomsbury.
- Stanford, J. (2017) 'The resurgence of gig work: historical and theoretical perspectives', *The Economic and Labour Relations Review*, 28 (3):382–401. doi: 10.1177/1035304617724303.
- Sümer, S. & H. Eslen-Ziya (2023) 'Academic women's voices on gendered divisions of work and care: "Working till I drop ... then dropping"'. *European Journal of Women's Studies*, 30 (1):49–65. doi: 10.1177/13505068221136494
- Szadkowski, K. (2016) 'Towards an orthodox Marxian reading of subsumption(s) of academic labour under capital', *Workplace: A Journal for Academic Labor*, 28 (1):9–29.
- Terranova, T. (2000) 'Free labor: producing culture for the digital economy', *Social Text*, 18 (2):33–58. doi: 10.1215/01642472-18-2_63-33

- Threadgold S. (2018) 'Creativity, precarity and illusion: DIY cultures and "choosing poverty"'. *Cultural Sociology*, 12 (2):156–73. doi: 10.1177/1749975517722475
- Tight M. (2019) 'The neoliberal turn in Higher Education', *Higher Education Quarterly* 73 (3):273–84. doi: 10.1111/hequ.12197
- UCU. (2019) 'Counting the costs of casualisation in higher education', *UCU*. Accessed April, 11, 2023 from https://www.ucu.org.uk/media/10336/Counting-the-costs-of-casualisation-in-higher-education-Jun-19/pdf/ucu_casualisation_in_HE_survey_report_Jun19.pdf
- UCU (2020) 'Second class academic citizens: The dehumanising effects of casualisation in higher education', *UCU*. Accessed April, 11, 2023 from https://www.ucu.org.uk/media/10681/second_class_academic_citizens/pdf/secondclassacademiccitizens
- Vostal, F. (2016) *Accelerating Academia: The Changing Structure of Academic Time*. Basingstoke, NY: Palgrave Macmillan.
- Watermeyer, R., T. Crick, C. Knight & J. Goodal (2021) 'COVID-19 and digital disruption in UK universities: afflictions and affordances of emergency online migration', *Higher Education*, 81:623–41. doi: 10.1007/s10734-020-00561-y
- Williamson B. & A. Hogan (2021) 'Pandemic privatisation in higher education: Edtech & university reform'. Accessed April, 11, 2023 from https://issuu.com/educationinternational/docs/2021_eiresearch_gr_covid19_commercialisation_digit/1