

'The Robots are Coming 2 – Rise of the Screens': The role of higher education careers professions in disrupted times

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Abstract

This article reflects on the role of higher education (HE) careers professionals in the post-covid era, and how their practice might evolve in that context. First, the article considers student and graduate career preferences and social experiences during the crisis phase of the pandemic and the ways that such experiences have shaped their position and career development. It then considers studies of the hybrid workplace, highlighting the pandemic's impact on a graduate's likely early experience of work. Drawing these aspects together, the article offers recommendations to help career development professionals sustain the relevance of their practice in these disrupted times.

Keywords: Higher education career service; artificial intelligence; digital economy; career development; COVID

Introduction

In April 2018, an article by the first author, published in the NICEC Journal, reflected on the relative stability of early career graduate workplaces in the UK dating back over the previous thirty years, and suggested that the consistency of skills requirements by employers and for career progression was about to be challenged (Thambar, 2018). The prediction at the time was that a 'Fourth Industrial Revolution' would emerge from a combination of developments in artificial intelligence (AI), big data, bio and nano-technologies, transforming the ways we would live and work (Schwab, 2016). There were concerns that a rapid acceleration in the role of AI could undermine humans in society,

particularly in labour market roles that could be more easily replaced by advanced technology (sometimes robots), thus rendering groups in society unable to make a living (Osbourne, 2017). This vulnerability was not the sole preserve of jobs composed primarily of transactional and repetitive tasks, so traditional professions, typically requiring a degree, and including law and medicine, could be significantly altered (Susskind & Susskind, 2015). Not unreasonably, few at the time predicted that it would be a pandemic that would inflict global turbulence to those in education, and a career shock to all those in, or entering, the workplace. Nor was it anticipated that before robots could replace humans, screens would become the primary mediator of all human contact, at least for some time.

In this article, we reflect on the disruption that the pandemic has caused to previously familiar terrains of student experience and graduate recruitment based on our professional experiences as an Associate Professor in Organizational Psychology responsible for work experience in a Faculty of Business, and a Director of Careers and Employability, in our respective institutions, working throughout the pandemic period. We then consider lessons learned from research undertaken and reported by the University of Leeds (Hughes and Davis, 2021) around transitions to the new graduate workplace, to highlight new challenges and skills that are required for graduates to successfully transition to the post-covid workplace. Finally, we set an agenda for higher education careers professionals to help meet the challenge. This work is set in the UK and the context of its pandemic response which involved periods of lockdown and regionally tiered restrictions. We recognise that the equivalent environments in other countries will have been affected by their own pandemic experiences.

The disrupted student experience

During the pandemic, students in many academic disciplines experienced sudden, rapid transition to online and remote learning and assessment, alongside the restriction of opportunities for social activities. During the crisis phase of the pandemic, the experience of new students involved arriving at university following a turbulent period of A-level assessment and being fully locked down at the start of their higher education career. Established students had to rapidly adjust to restricted and remote learning, having started their university career in the 'normal' way. Consequently, a largely in-person experience in which devices were an accessory for study and leisure, was suddenly transformed to an experience in which the screen became the primary channel through which students conducted their lives. Beyond the acute crisis, screens are still prevalent, with 50% of the UK adult population now using screens for 11 hours or more each day, and 28% using them for over 14 hours (Clayton & Clayton, 2022).

Today's student experience is typically now dispersed, incorporating a blend of in-person and on-line education: the enabling of hybrid possibilities is changing the way in which students expect to engage with study, with online options offering greater accessibility and flexibility. Students still appreciate and seek in-person contact as part of their experience, although ideally at times that suit them (Thambar, 2022). This is leading to reduced student engagement with in-person classes and lectures (Williams, 2022), and with that, considerable debate within the sector about the importance of challenging traditional pedagogy (García-Morales et al., 2021). Discussion also continues into the ways that universities can be enabled to embrace the possibilities that screens bring (Donald et al.,

2021), in ways that seek to build a sense of teaching presence and progression of learning in hybrid, blended and online environments; and that encourage student collaboration, rather than perpetuating a sense of isolation that began during the pandemic (Singh et al., 2021).

A dispersed student experience with fewer traditional touchpoints throughout the journey, is altering the ways students form social networks and gain experience that develops their skills and attributes. At the height of the pandemic, a growth in loneliness emerged (Phillips et al., 2022) with 74% of students reporting a pandemic-related negative impact on their wellbeing and mental health (Frampton & Smithies, 2021). Opportunities for in-person socialising are now being restored to pre-pandemic levels, but this will not automatically offset the impact of the previous three years. For students considering their careers, work experience opportunities which decreased dramatically at the start of the pandemic are now back at a healthy level, with more in hybrid form; but there will be many who missed opportunities to develop their skills during their student career (Institute of Student Employers, 2022).

The graduate recruitment shock

Akkermans et al. (2020) suggested that the pandemic will have differing career impacts depending on individual levels of resilience and career skills; differential impacts in the short, medium, and longer term (the latter yet to materialise); and that those impacts could be negative or positive depending on an individual's circumstances and capacity to respond. The UK's graduate market was immediately affected by the onset of the pandemic. Economic fluctuations in the early stages of the pandemic (ONS, 2020), were reflected in those who were seeking work around that time. They noticed a fall in vacancies, with many graduates rethinking career plans, and taking on roles that did not require their graduate-level skills or qualifications, feeling less confident about the prospects of securing work, and finding it harder to secure work than they had reasonably expected (Tomlinson, 2021). There has been a swift bounce-back, with graduate vacancies in late 2021 at a higher level than pre-pandemic (Ball, 2022). More enduring, however, have been the impacts of comprehensive technological solutions on graduate recruitment. Rapidly introduced in response to government-directed lockdowns, computer monitors and smart devices, are a ubiquitous presence in today's graduate career development journey.

Meanwhile, over the last few years, the use of AI has accelerated, to the point where we live increasingly in an age of 'algorithmic governance', monitored, nudged and reminded, in many aspects of our personal and professional lives, through smart devices (Danaher, 2020). This 'algocracy' (Anneesh, 2006, 2008, Danaher, 2016) raises major debates about privacy and surveillance, bias and inequality, and transparency and procedure (Danaher, 2020). The pandemic accelerated AI use in recruitment and selection processes, from chatbots and video interviews, to AI-assisted or even AI-led interviews, to the extent that the algorithm both facilitates the interview and makes a recommendation on whether a candidate proceeds (Institute of Student Employers, 2023). For candidates, the benefits of accessibility in times of restricted travel were balanced by the negative experiences of de-personalisation which had the potential to leave them cognitively and emotionally exhausted, and with 'feelings of diminished humanity' (Jaser et al., 2021, pp.7). Concerns about bias when using AI are well-documented (Bogen, 2019). Yet, recent investigations

indicate that the use of AI in recruitment is now widely established. According to the Institute of Student Employers, one in ten recruiters are now using AI in their process, most frequently to pre-screen candidates and analyse interviews, but also using algorithms to analyse CVs, to update candidates on their progress, and using AI in gamified assessments (Roberts, 2022). This prevalence increases the risk of AI recruitment biases, which could lead to higher cohort homogeneity, and decreased diversity and social mobility (Bogen, 2019).

Once recruited, many students now have a significantly altered experience of moving into graduate-entry and graduate-level roles. As a result of mandatory remote working for many, collaboration platforms such as Microsoft Teams and Zoom have been rapidly embedded into workplace practice in many sectors, typically for roles that would have previously involved office-based work and have been considered 'white collar' in scope. Beyond the period where remote working was a legal requirement, a blend of working on and off-site (typically at home), coined 'hybrid working', has emerged as a norm in many working environments, and for a wider range of employees, including those at more junior levels of employment. It is still likely to be the case that remote and hybrid working patterns are disproportionately more viable for those involved in certain types of 'white collar' work (like graduates). Nevertheless, in a longitudinal study, exploring the prevalence of different work patterns between 2020 and 2022, Davis et al. (2022) found that hybrid work was preferred by a constant majority of employees, with employers also expecting workers to split their time between home and the office, to achieve improved work-life balance and wellbeing benefits, alongside opportunities for collaboration, social interaction, and technological support (Ball, 2022). However, the value of hybrid working for new and early-career graduates, is more contentious (BBC News, 2021; Scrimgeour, 2020), with research suggesting that remote and hybrid working at the career outset, may negatively impact initial experiences of work.

Hybrid working: The socio-technical challenge

The shift to hybrid working is not simply a technical problem that can be resolved through good technological choices (Davis et al., 2022, a,b). It is a complex, socio-technical challenge, because choices about aspects such as hybrid policy, and the role, purpose, and availability of technology and types of workspace, are intertwined with social aspects of the hybrid workplace, including individual choice, organizational culture, and preferred ways of working. Research undertaken by the University of Leeds (Davis et al., 2022, a,b) drawing on primary data collected across sectors and organizations, shows how aspects of the socio-technical system interact in both intended and unintended ways, creating differential experiences. Related research, has sought further to unpick the particular challenges faced by graduates and interns (Hughes, 2022; Hughes & Davis, 2021), showing how graduates have a distinct experience in hybrid settings characterised by inter-connected challenges. These are outlined below:

Hybrid working affects the way that graduates learn to do their job. Graduates reported being well prepared to complete job tasks through their degree, and induction training offered by their employers. They appreciated the opportunity to replay instructional videos, and consult manuals and websites, without having to reveal they had done so, or disturb more senior colleagues. However, they reported taking longer to learn the culture of the

organisation, with some admitting limited understanding of norms and etiquette months later. Graduates reported missing the 'bigger picture', because they did not know why they were undertaking certain activities, or how they fit alongside the wider work of colleagues. In online environments, there were fewer opportunities for 'osmosis learning', and to overhear conversations about other projects, or pick up on opportunities through informal interactions, because colleagues often attended the office on different days to them.

On returning to offices post lockdowns, graduates reported appreciating the value they obtained from the physical workspace, which provided better cues about aspects of hierarchy (e.g. through office sizes, décor, or restricted spaces), and helped them understand how to communicate with others, through easier assessment of office formalities (dress code etc.), and the approachability of colleagues. In the absence of workplace models, graduates noted that role models in their homelife became more important, as they learned the norms of remote work by modelling the behaviours of siblings, and parents (e.g., during their conference calls), while others benchmarked workloads and experiences through social comparisons with young professionals in their house-shares.

Remote and hybrid communication brought further challenges for less-experienced graduates. They found it difficult to know when to ask questions, and who to ask. They could not ask questions across desks as readily, so had to arrange meetings for simple questions, delaying their ability to complete tasks and/or secure opportunities. Graduates found it more difficult to make sense of workplace politics and unspoken sentiment. Miscommunications were more likely when working remotely, and were harder to resolve, because difficult situations could be avoided more easily, for instance by turning cameras off to hide frustrations, or choosing to work from the office on different days, to avoid people and situations.

Another challenge for the hybrid graduate was building the relationships they needed, to progress their career. They found it straightforward to build peer friendships but considered these peer networks to offer limited value to career possibilities and trajectory. Rather than considering 'networking' as a natural component of a workplace role, they saw it as a set of discrete tasks focused on making contacts on platforms such as LinkedIn or meeting senior people at conferences or events.

A final challenge identified by Hughes and Davis (2021) is that graduates reported difficulties demonstrating proactivity in hybrid environments. They struggled with infrequent and formalised access to senior colleagues and teams and missed chance conversations in corridors and kitchens. They found it difficult to establish visibility and exposure in these circumstances, wanting to ask questions, but struggling to do so confidently, and without appearing intrusive and/or demanding. In some cases, this was to the extent that they reported spending days with little to do when they had finished their work, because they assumed they had misunderstood the brief. In a physical workspace, they believed these challenges would have been more obviously recognised and dealt with.

Collectively, these findings underline the importance of considering hybrid working and the rise of screens, as a *socio-digital* challenge. They show that work tasks of any kind, are not completed in a vacuum, but are socialised in the context of the wider work environment (Maitlis, 2005). Graduates draw on prior experiences – perceived successes and failures

– to contextualise new experiences, and these experiences also help employees to benchmark their performance and recognise and respond to new challenges.

Higher education careers professionals: Meeting the challenge

Higher Education (HE) careers professionals operate at the nexus of student, academic and employer interests (Thambar, 2016). These three terrains have been disrupted in recent years leading to a change in their professional operating environment. Nonetheless, careers services seized the opportunities that online and remote services offered for student engagement and methods of delivery (Hooley & Binnie, 2020). Services also saw the potential of online engagement, particularly to connect students with employers who, pre-pandemic, might not have had time or capacity to participate in on-campus activity, particularly with institutions they did not traditionally prioritise for recruitment (Thambar et al, 2020). Throughout the disruption, careers services worked persistently to retain their position as an expert service, supporting students, collaborating with academics, and facilitating positive and informed connections between recruiters and potential candidates.

However, the pandemic's disturbance has amplified areas of long-standing interest for careers professionals (Hughes & Thambar, 2023). Three are identified here:

- 1) Social Mobility has been severely challenged. Reduction in opportunities to gain recreational and work experience that would build skills and connections, has favoured those with stronger social capital, placing them at an advantage in the early stages of career (Tregaskis, 2021).
- 2) It has been difficult for students to maintain their wellbeing and sense of belonging, both important factors in the ability to foster the necessary confidence to engage in skills and experience building, and career planning (Frampton and Smithies, 2021).
- 3) The changes to office-based workplaces, outlined above (Davis et al., 2022), mean that supporting students through their transition from study to work – whether work experience or graduate employment – requires preparing graduates to navigate more complex and individualised landscapes.

In this context, the following suggestions are offered to enable HE careers professionals to continue deploying expertise to the benefit of their stakeholders, even in these disrupted and evolving times. It could be argued that there is nothing novel about the principles behind them which are long-established in guiding practise and provision. However, the speed and scale at which the operating context has changed demands reflection to ensure that approaches evolve and remain relevant as we emerge from this distinctive period.

- 1) **Integrating employability within student education.** This is a primary focus for many careers professionals with 'employability' now extended to include preparation for the digital workplace, as well as knowledge, skills, and capabilities, that will enable students to fulfil graduate roles and progress in their career. Many university programmes today incorporate digital competencies into programme syllabi as standard practice, to prepare graduates for transition to the workplace – be it through the nurturing of programming skills, exposure to AI,

or through digital assessments such as blog posts, and video production (Digital Skills Organisation, 2022; García-Morales et al., 2021). For careers professionals, liaison with academics should extend to ways in which pedagogy is adapted, so that approaches to blended learning can equip students to meet hybrid working challenges. By keeping abreast of workplace developments to inform their institutions, careers professionals can make a significant contribution to integrating effective employability learning into Student Education.

- 2) **Equipping students to develop their own career trajectories.** In times of disruption, career paths are more dynamic, requiring self-direction and self-reliance. While career theory underpins the work of careers professionals, making theory explicit to students will enable them to craft a way forward, and be encouraged, despite the uncertainty that lies ahead (McCash, 2006). Planned Happenstance (Krumboltz, 2008), and Chaos Theory (Pryor & Bright, 2011), may provide particular reassurance. Similarly, understanding the role of social learning and Community Interaction Theory (Law, 1981) in career choice and opportunity awareness will help students to optimise work experience opportunities and prepare for active engagement when hybrid working in order to create opportunities for themselves.
- 3) **Creating opportunities to experience work.** This is long-established provision, but as workplaces rapidly evolve, the opportunity for a student to get used to an environment *before* they need to adapt to it will be important for successful transitions. Those entering the hybrid workplace will benefit from a range of work experiences to reflect against, so they can better calibrate hybrid work experiences, and understand what they like and dislike. To support social mobility, careers professionals should help ensure that in the access to, experience of, and learning from being in the workplace, students *without* siblings and parental role models are not disadvantaged in their university to work transition.
- 4) **Enabling decision-making.** In an environment where social learning opportunities have been limited and will be changing in structure, expert advice and guidance are ever more important to help students to make informed, realistic and positive choices. This is not an alternative to the increasing use of technology in Careers Service activity, but it is a risk for those needing support if guidance is considered a poor or cost-ineffective relation. There is value in the powerful partnerships that enable specialised platform providers to unleash the potential of technological integration and AI, to enable connections between careers services, students and employers, tailor content, and support and map career journeys. There may also be value and efficiency in simulated AI-enabled recruitment activities, offering opportunities to practice and provide rapid feedback, thus increasing the immediacy and access of career development support. But there are risks that options could be closed down, dismissed, or never presented without expert intervention, to offset 'algorithmic governance' where it prevails.
- 5) **Maintaining insights.** A careers professional's expertise includes knowledge of labour markets and career paths which must now extend to include a contemporary understanding of evolving workplaces and practices. Informed insights into role profiles in a hybrid world will enable careers professionals to help

students and graduates understand their likely fit. Equally, up-to-date insights on the evolving student experience and pedagogical practices will enable careers professionals to help employers understand the student experience and appreciate the alignment of educational with professional digital skill development, because they themselves will have informed institutional pedagogy (see point 1, above). Careers professionals can also, then, support employers in developing strategies and messaging that helps them attract, recruit and retain graduate talent; while anticipating the professional development requirements of future recruits.

- 6) **Fostering wellbeing.** Underpinning the approaches above, careers professionals play a role in supporting student wellbeing through the ways in which they engage with students. Offering opportunities for in-person and individual conversations, and enabling group learning, will provide valuable opportunities to offset loneliness, practice interaction, and build confidence in socialisation, which will help to build networks. Peer-to-peer delivery of initial careers engagement will also add value here. Like other cross-sections of the workplace, graduates reported polarised experiences of how remote and hybrid work affected their well-being and work-life-balance. Careers professionals can support the wellbeing dimension of transitions to the workplace by reinforcing the value of self-awareness and reflection, helping students build their ability to establish good relationships with peers and seniors.

An illustration of the retention of enduring principles in a changing context is the work of the University of Nottingham where, in 2018, a dimension of employability education was introduced to the curriculum by identifying four professional competencies that would be surfaced and articulated appropriately within every academic discipline: *Professional Communication*, *Digital Capability*, *Co-ordination with Others*, and *Reflection* (Thambar, 2018). A review in 2021, and further reflection in 2022 in the context of changing workplaces and the evolving student experience (Thambar, 2022), has confirmed that they are appropriate for the challenges that students face, but that the context in which students will deploy such competencies has changed significantly in many graduate arenas. For example, *Professional Communication* is now as important online as in person, *Co-ordination with Others* requires insightful use of collaboration platform, to achieve outcomes and develop effective, meaningful working partnerships and *Reflection* is more widely recognised as a critical component of wellbeing. Thus, the way in which careers professionals support and promote the articulation and development of these competencies is changing to reflect the evolving student and early graduate career experience.

At this crossroads in the pandemic journey, and with the old fruits of the past re-emerging in the landscape, it can be tempting to set aside the pandemic and welcome back the familiar. Yet, in spite of their challenges, the screens have brought new possibilities and engagement, alongside new expectations from students, and their future employers. In other words, the careers eco-system has evolved, along with the rules of engagement. Now is an optimal time to step back and reflect on practices that have emerged and evolved over the past few years. Not only do we need to ensure that current approaches are relevant, but also that they have the capacity to evolve, as the pandemic career shock continues to reverberate.



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