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The digitalization of work and social justice - reflections on the labour process of English Further Education teachers

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The digitalisation of work and social justice - reflections on the labour process of English Further Education teachers.

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The chapter sets the discussion within the broader socio-economic context in which Further Education teachers labour, one characterised by underemployment and over-qualification, precariousness and the prevalence of 'rotten jobs'. In this context educational workers are subject to high levels of surveillance rooted in regimes of performativity and institutional risk aversion. Paradoxically these practices rest alongside what Glazer (2014) describes as 'busy work' - meaningless activities that distract us from interrogating the nature of our labour. The previous processes are facilitated by the digitalisation of work and carry significant social justice implications which are averred to in conceptualisations of immaterial labour, digital capitalism and cognitive capitalism. Whilst digitalisation has enabled work to penetrate our entire lives appropriating what could be described as free labour, we should nevertheless avoid an overly technicist and determinist analysis. Digitalisation not only carries with it oppressive possibilities but is also provides a site of struggle that can be mobilised in the pursuit of social justice. The chapter explores these tensions in relation to the work of Further Education teachers.

James Avis
Cheryl Reynolds

The digitalisation of work and social justice - reflections on the labour process of English Further Education teachers.

This chapter explores the digitalisation of work with particular reference to the labour process of Further Education teachers in the UK. We have in mind those teachers who work in colleges of Further Education and more broadly in vocational education and training. It is important to acknowledge that Further Education, or what has sometimes been referred to as the education and training sector includes a diverse range of activities. These encompass Vocational Education and Training, adult and continuing education, functional skills, general academic as well as vocationally orientated education. In the latter case, the curriculum offer ranges from entry through to degree level qualifications. The age span ranges from 14 year olds to adults of any age, with provision being similarly diverse and delivered by both private and public organisations. Digitalisation and information communication technologies (ICT) constitute an ever present backdrop to teachers' labour across this diverse sector. Interactive screens of all kinds are ubiquitous, with both staff and students constantly drawn into engaging with their work and one another through tablets, smartphones, laptops and computers.

Whilst our discussion is located within a particular social formation, namely England, that has specific features, nonetheless the argument has a wider purchase that extends beyond this location. Neo-liberalism, austerity, digitalisation, precariousness as well as the marginalisation of Vocational Education and Training are features of societies in the global North and South (Pilz, 2016). In what follows we set teachers labour within the broader socio-economic context in which it is located. In addition we consider the relevant theoretical discussions that inform our argument before addressing the specificity of the labour process.

There are two points of which readers need to be aware. Firstly, the education and training sector in the UK, and in particular England, has been viewed as being for 'other people's children', and as with Vocational Education and Training is seen as having low status (Bathmaker, 2014a, b). Few members of the governing and dominant classes, and indeed of those who research the sector, have graduated from Further Education. Secondly, and lest we be misunderstood, we wish to distance ourselves from those arguments that locate digitalisation within an overly technicist and determinist analysis. As with any technology, digitalisation in a capitalist society is a site of struggle embedded within social relations of power. This is notwithstanding moments when digitalisation could be seen as exercising a degree of agency, though to the extent that this occurs, it will be channelled through the relations of power in which it is embedded. O'Keefe (2016) has illustrated the manner in which the algorithms that underpin the assessment of adult competencies are based on a

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range of assumptions, methodologies and instruments which are linked together in a complex manner. The digitised data produced as a result of these complex processes will be drawn upon by policy makers to shape evidence-informed practice and consequently will have material effects. Much the same claim can be made about data that informs PISA (Program for International Student Assessment), TIMSS (Trends in International Mathematics and Science Study), PIRLS (Progress in International Reading Literacy Study) and so on, with these metrics informing practice. Such data provides a backdrop to performative practices against which managers and state officials judge educational institutions, processes that are linked with benchmarking and the assessment of teachers (Williamson, 2016a).

Socio-economic and political context

Regardless of purported political orientations, politicians of both left and right accept the current hegemonic dogma that education should pursue competitiveness and that if achieved a successful and vibrant economy will contribute to the wellbeing of all members of society. This assertion has some affinity with neo-liberal constructions of the economy and the uncritical celebration of the market as seen in the policies of the current Conservative government in the UK and its coalition and New Labour predecessors. In addition it is also a feature of policies that veer towards the social democratic, with McDonnell who at the time of writing is Labour's Shadow Chancellor suggesting that,

restoring trade union rights and extending them to ensure workers are involved in determining the future of their companies is critical to securing the skills, development and innovation to compete in a globalised economy. (McDonnell, 2015 Unnumbered)

At the same time these constructions of the economy, regardless of their inflection, operate on a capitalist terrain. That is to say they accept capitalism, albeit that in the case of those having social democratic sensibilities the concern is to soften the harshness of neo-liberalism in the hope that a fairer and more just capitalist system is feasible (Hutton, 1995, 2010, 2015). However, it is important to recognise that capitalism remains capitalism and that it is concerned with the extraction of surplus value by whatever means possible (Huws, 2015). The point is that to the extent that the system is fairer this does not derive from the logic of capitalism but rather from the balance of force between labour and capital. The contraction of inequality in the period following the end of the Second World War was the outcome of struggle and was not a result of the beneficence of capital as can be amply demonstrated in the current conjuncture. Over the last thirty years or so capital has attempted to claw back the concessions won by the working class in the earlier period resulting in a significant deepening of inequality.

There is a paradox, in that the state's commitment to the rhetoric of competitiveness and the development of the economy is accompanied by the assumption of upskilling and the

necessity that all members of society are required to develop skills in order to render themselves employable. The irony is that this call is set within a context in which levels of inequality are returning to those found before the Second World War. There has been what some have described as a hollowing out of the class structure. That is to say, the eradication of managerial and administrative jobs as well as other middle level positions with digitalisation being mobilised to facilitate the restructuring of the labour process. Roberts (2013) analyses the loss of 'middling' jobs, with Brown, Lauder and Ashton (2011) referring to digital Taylorism. The latter refers to processes in which the formerly skilled jobs of 'knowledge workers' have become standardised and deskilled - a process facilitated by digitalisation. The result is a labour market in which there is polarisation of skill (Cedefop, 2012). Such processes are reflected in what Allen and Ainley (2007, 2014; and see Allen 2015) describe as the insecure working / middle class located within a pear shaped or hour glass class structure. This class structure is characterised by increasing levels of inequality as can be seen in the polarisation of income and wealth as well as skill (Dorling, 2011, 2014; and see ONS, 2014). In comparison with the period following the Second World War rates of upward social mobility have stalled. It is important to acknowledge that earlier rates of mobility derived from changes in the occupational structure rather than the pursuit of equality (Hoskin and Barker, 2014). Precariousness has now become all pervasive with underemployment, unemployment and over qualification becoming a feature of many people's working lives (Standing, 2011; Marsh; 2011). This co-exists with the continued significance of what Keep and James (2010, 2012) describe as 'rotten' jobs, with people 'churning' between low paid, low skilled jobs, interspersed with periods of unemployment (Shildrick, MacDonald, Webster, and Garthwaite, 2012). Writers such as Blacker (2013) extend this argument and suggest that "The current neoliberal mutation of capitalism" has shifted towards "a mode of elimination that targets most of us" (P.1). Marsh (2011) adopts a not dissimilar argument (and see Gorz, 2010). In other words swathes of the working and middle class have in effect become redundant being part of a 'surplus' population that is no longer required by capital. There is a link here with those arguments that address the salience of immaterial labour, digitalisation and cognitive capitalism. These arguments suggest that surplus value is generated in practices external to the capitalist organisation.

Immaterial labour, digitalisation and cognitive capitalism

It is important to acknowledge the uneven development of the means of production whereby earlier forms sit alongside those that have developed contemporaneously. The shift from Fordism to Post-Fordism, with the latter emphasising team work and the salience of knowledge, can be used to represent the significance of immaterial labour in the current conjuncture. For Lazzarato (2006) immaterial labour encompasses two aspects. The first involves cybernetics and computer control – the mobilisation of digital technologies. The second includes a range of activities that are not normally considered to be a feature of waged labour. In this instance Lazzarato refers to 'the fixing of cultural and artistic standards' and so on (Lazzarato, 2006: 132). In this case there is an emphasis on identity as

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well as the development of particular forms of subjectivity. As with other writers associated with Italian workerism the move towards immaterial labour is seen to have arisen in part as a result of capital's response to worker struggles against Fordism, and what Lotringer (2004: 11), Tronti (2007) and others have referred to as the 'refusal of work'. In addition, some of the features of Fordism and its alignment with the Keynesian welfare state supported the development of mass education systems which provided the foundation for the increased emphasis on knowledge in the current conjuncture. Vercellone (2008) refers to 'the constitution of a diffuse intellectuality generated by the development of mass education' allied to increasing levels of training and the social struggles that secured 'the spread of social income and welfare services' (unnumbered). This resulted in conditions favourable to the development of the knowledge based economy. Whilst the preceding argument appears to question notions of deskilling and the prevalence of 'rotten jobs', this is only an apparent contradiction. Firstly, as Gramsci (1971: 9) reminds us 'all men [sic] are intellectuals' and that despite the constraints surrounding Fordist work processes surplus value was and is generated through the activities of workers – that is to say, the mobilisation of variable labour power. Even in the most humdrum types of work there will be scope for the exercise of intellect (Avis, 2010). This could be used to make the labour process more manageable through the use of 'workarounds' and the like. Secondly, in the current conjuncture digitalisation has deepened the significance of intellect which has become aligned with the development of an enterprising subjectivity. This subjectivity articulates with networked relations and project based employment both of which are a feature of precariousness. In this instance work has the potential to 'invade' all of life, whereby,

one's entire life is put to work, when knowledges and cognitive competences of the workforce (the *general intellect* that Marx spoke about in his *Grundrisse*) assume the role played by machines in the Fordist period, incarnated in the living productive bodies of cooperation, in which language, effects, emotions and relational and communication capacities all contributed to the creation of value. (Marazzi, 2011: 113)

Some commentators have argued that the salience of language, emotions, relational and communicative skills reflect the feminisation of labour (Morini, 2007). This assertion draws not only on gendered stereotypes but also the suggestion that these features are a significant attribute of immaterial labour. In addition such arguments acknowledge the way in which life outside waged work in capitalist organisations contributes towards the development of surplus value. Women's domestic labour would be a case in point, but so too is the labour of the precarious worker, as is the manner in which the exercise of the general intellect can create value external to the capitalist organisation.

Digital Labour

For Frayssé and O'Neil (2015: 15) digital labour refers to the affordances offered by ICT that facilitate 'labour everywhere and at any time'. Importantly, it also enables people 'to work unwittingly when engaged in leisure, communication, and consumption' (Frayssé and O'Neil, 2015: 15). Often digital labour is used to refer to the production of value outside waged relations and in particular stresses the significance of user engagement with social media as well as the internet. Such engagements were thought to offer users an ability to express their 'species being' as well as enabling them to be involved in non-alienating activities (but see Fisher, 2015: 126). In such accounts the collective processes encompassed in engaging with the internet were thought to provide not only empowering but also democratic possibilities (Benkler, 2006; Shirky, 2008). Such practices were thought to presage the transformation of society and the development of new forms of sociality. Terranova suggests that these celebratory accounts mobilised a 'cyberdemocratic model' (2004: 135) that sought to revitalise the public sphere of civil society. A range of terms have been used to capture such prefigurative possibilities: peer to peer (P2P), crowd sourcing, co-configuration, mass customisation, prosumption, produser, collaborative consumption, the sharing economy, social production, etc. All these terms emphasise collective processes which have broken down previous dichotomies and are thought to anticipate fundamental societal change. Engeström (2010), as with Adler and Heckscher (2006), argue that the logic of capitalist development which derives from the transformation of the forces of production is towards the incipient socialisation of the means of production. Engeström (2010:2 32) in this instance draws upon Victor and Boynton (1998:233) to illustrate the direction of change in the modes of production, from craft towards social production (Avis, 2016a). Digitalisation plays an important role in this process

Whilst it is the case, in Engeström's terms, that digitalisation can transform the mode of production, there are however a number of caveats that question the progressive direction of such change. Perhaps we should view digitalisation as embedded in capitalist relations. After all the internet is predicated upon a material infrastructure as well as the activities of capitalist organisations such as Google and Facebook. Terranova (2004) utilises the notion of channelling to describe this context, arguing that this is a more appropriate description when set against accounts that view digital work as taking place outside capitalist relations. Rather, as Terranova (2004:94) suggests these relations 'are the result of a complex history where the relation between labour and capital is mutually constitutive [and] entangled'.

What is distinctive about digital labour, or perhaps more correctly what has been intensified as a result of its development, are the ambiguities surrounding such labour. Marxist analyses have considered the relationship of digital to un/productive labour. In this case user activity on the Internet can be construed as a source of 'free' unwaged labour. For example, it can contribute to the development of open source materials of varying kinds, which can be, and are appropriated by capital to generate surplus value - or as some would argue rent (see Frayssé, 2015). User profiles generate data that can be 'mined' and sold as a

commodity to capitalist organisations (Scholz, 2013: 1-2). In this instance user labour, whilst unpaid can result in capital's acquisition of surplus value, and in this respect such work can be viewed as productive. Terranova (2004) amongst others warns against an oversimplified understanding of digital labour, with Jarrett (2015) arguing that the distinction between unproductive and productive labour is overdrawn, as are a number of other binaries – consumer/producer, author/reader, speaker/audience, reproduction/ resistance, use/exchange value, exploitation/self actualisation, and so on. As Andrejevic (2013) argues digital labour is multifaceted and can at one and the same time exploitative and a source of pleasure, or as Jarrett (2015: 215) notes, “consumer labour can be simultaneously the “unproductive” generation of socially meaningful use-values and the production of the exploited and exploitable audience-commodity”. However, what is particularly distinctive about digital labour and its articulation with the socio-economic formation is the manner in which all of life is put to work in what can be described, post Tronti, as the social factory (Ross, 2013: 25). Here the boundaries between work and non-work, labour and pleasure have become permeable. The notion of the social factory seeks to capture these ideas.

‘All of life is put to work’ - the digital labour of Further Education teachers

The preceding sets the socio-economic and political terrain in which the subsequent discussion is located. English Further Education/Vocational Education and Training encounters the full force of neo-liberal state policy, characterised by funding reductions (Avis, 2016b:13) an increasingly casualised and feminised workforce (Simmons and Thompson, 2007) who face precarious working conditions (Daley, Orr and Petrie, 2015; Lucas and Crowther, 2016). This workforce is heavily surveilled through performative practices concerned with target setting, internal college self-assessment and Ofsted inspections (Ozga, 2016). These processes are benchmarked against the digitalised data produced by supranational organisations such as PISA, TIMMS, the OECD and the EU, which in turn impacts upon the practices of sector workers. Digitalisation articulates to teacher practice in any number of ways and can be seen in the ubiquitous computer screens in foyers, learning centres, computer rooms and classrooms (Decuypere and Simmons, 2016). Word and PowerPoint are almost unnoticed through their normalisation.

The ‘terrors of performativity’ (Ball, 2003) are well rehearsed in the literature, with these being currently intensified and exacerbated by reduced funding (Lucas and Crowther, 2016). Some time ago Avis summarised the key findings of research on the labour process of Further Education teachers. This research agreed on a number of elements surrounding this work, which have remained in place,

- loss of control
- intensification of labour
- increase in administration

- perceived marginalisation of teaching
 - stress on measurable performance indicators
- (Avis, 1999: 251)

Further Education institutions, since the early 1990s, have been required increasingly to operate as commercial enterprises, competing with one another in quasi-markets created, maintained and controlled by the state. The mechanisms for control include policy imperatives, shifting qualification frameworks and the use of performance-related funding based on recruitment, retention and achievement. The promotion of 'diversity' and 'choice' and the notion of student as consumer have become central features of both policy and popular discourse.

The last three decades have seen the decline of collegiality and the rise of the Further Education 'manager'. This change is typified by the replacement of academic titles such as 'Head of English' or 'Principal Lecturer' with the language of the commercial world such as 'line manager', which points towards the encroachment of a discourse and practice of managerialism into Further Education. This represents a wholesale shift towards a kind of technical-rationalism predicated on performance management, accompanied by an emphasis on performative notions such as efficiency, entrepreneurialism, income streams and core products. Ball (2003) as well as Randle and Brady (1997) have made the compelling case that this performative shift has led to the proletarianisation of teaching. Further Education teachers operate under systems of increasing regulation, stringent mechanisms of inspection and validation, and extensive systems of measurement, monitoring and control. Further Education practitioners are increasingly co-opted into their own subjugation through the requirement to produce operational and strategic plans and self-assessment reports. Institutions are forced to operate under all-pervasive quality 'regimes' within a target-driven culture.

These ideological and material shifts have been accompanied by significant changes in the material environment of Further Education, in terms of the nature of sites of learning and technologies typically employed. The literature on Further Education teachers' labour process plays down the significance of digitalisation in the intensification of labour. We draw on the words of a key informant to illustrate changes in Further Education teachers' work, using this to point towards the affordances for a neo-liberal project provided by digitalisation. Our informant moved to Further Education from a secondary school in the 1980s,

At that time, College Reception was a tiny frosted window into an office and you had to knock and wait, sometimes interminably. It was expected that you would know where you were going. It wasn't friendly. There was no competition and no choice. Incorporation in 1992 was the real start of the marketisation of Further Education and that's when things really began to

change. Now you get these big, bright, open, funky reception areas with sofas to bring people in.

These physical changes to the Further Education environment were accompanied by the proliferation of performance-led funding models, which began to alter the nature of Further Education work and provided a powerful spur to its digitalisation. Our informant commented,

[Prior to 1992] there was no real accountability. Nobody ever tackled people about poor results. At incorporation, funding changed enormously. They tried all sorts of different mechanisms to draw down funding. They gave you 5% of funding for everyone you interviewed then incremental amounts for each term you kept them, then 5% for the pass. That's when the data really started to drive home. But there was no single system. People developed their own ways of getting print-outs of student attendance. That was the first form of digitalisation. I had a little Amstrad and was looked on as being an IT wizard!

The uptake of digital solutions was uneven, as was the shift from paper to digital records, and there was a period when colleges were compelled to keep *both* in order to satisfy regulators,

The [Funding Council] would check your digital records but then select a random sample where they wanted to see the actual form with a photograph of the learner and their signature. The College would take a photo of every student and staple it to the top of the form. But then it would get filed in the wrong place. You could only ever find 85% of them and that wasn't high enough for the [Funding Council]. You had a strange mismatch between what was held on computers and the hard copy forms.

These recollections chime with the way funding changes have subsequently been reported,

[The] output related funding system generated a perverse incentive structure... Providers engaged in 'unit farming' (entering students for extra qualifications within a single course, thereby increasing the number of funding units without having to increase student numbers) and 'unit maximisation' (prioritising those students who would attract the greatest number of funding units). (Panchamia, 2012: 3)

Digitalisation played an important role in the tracking and in some cases fabrication of data in response to funding imperatives (Denham, 2002).

Similarly, the link between funding and retention meant that Further Education practitioners were increasingly charged with keeping their learners on the course for as long

as possible and digitalised records became the trigger for the new work of chasing recalcitrant learners.

This form of data was very much driven by funding and people trying to exploit or subvert funding. That's when the developing relationship between 'bums-on-seats' and results started to come in. Enrolments, retention and achievement really came through and... staff were given these print-outs of non-attenders and asked, 'Have you rung this person?' And teachers would answer, 'Well, no, this is FE [Further Education]! They're adults. I shouldn't have to chase them. You'd got a mindset shift.

This reflects patterns of infantilisation commented on by Education Group II, but more importantly points towards the re-engineering of teachers' labour. Colley (2006) discusses the emotional labour involved in tracking students as well as the uses of texting to ensure, or at least encourage, attendance. This represents an extension of teachers' work to what was formerly seen as the domain of welfare workers (Avis, Wright, Fisher, et al 2011). In addition emails and social media create permeable boundaries between home and work. Zukas and Malcolm illustrate this in the case of university academics, but much the same argument can be applied to Further Education teachers (Page, 2015). Emails demand attention and swift reply in order not to fall foul of student satisfaction surveys and the like. Page (2015) suggests that Further Education teachers' personal use of the web blurs the boundaries between home and work. More importantly he suggests such use enables teachers to develop their skills in the use of facebook, twitter and other forms of social media that can enhance pedagogic practice. It can also provide short-term respite from the demands of work which can be returned to with renewed vigour, being 'a means of increasing worker productivity and developing... digital literacy' (Page, 2015:443).

Digital affordances that serve the exponential expansion in the demand for data and market indicators are often implicated in changing work patterns within Further Education and frequently seen in a technically deterministic light by teachers, who blame technology for imposing new requirements to digitally monitor and record data. However, behind the technology, political imperatives are at work to harvest and shape those that best suit their aims. In this context Further Education leaders will seek out means to generate the kind of data that serves institutional needs to display efficacy. This inevitably generates a market for technologies that can 'capture' and display positive outcomes (Williamson, 2016a). Digital solutions can be interpreted both as a response to political and social transformations as well as channelled by particular interests to encourage change in a specific direction.

An example of such a solution, arising out of Ofsted inspections lies in the growth of learning analytics. This is defined as 'the measurement, collection, analysis and reporting of data about learners and their contexts, for the purposes of understanding and optimising

learning and the environment in which it occurs' (Ferguson, 2012: 305) This definition leaves out one of the key aims of learning analytics. As well as optimising learning and its environment, this kind of data creates an audit trail of the work of an institution. Learning analytics can be seen as another instance where 'all of life is put to work'. The traces people leave when they use digital environments as part of a programme of study are appropriated in the work of assessing an institution's effectiveness. These traces are amenable to interpretations that shape the curriculum, and when done convincingly, institutions garner rewards in the form of higher inspection grades.

Data traditionally used for this purpose includes attendance monitoring, student retention and achievement, and progression to employment. More recently, however, the growth of e-learning and the explosion in educational use of electronic resources means that more and more data about learner behaviour is generated automatically and in harvestable form. Frequency and duration of student login to Virtual Learning Environments (VLEs), numbers of 'hits' on learning resources and frequency and type of library borrowings can be readily cross-tabulated with student grades. Insights that hitherto have gone unrecorded or been too costly to glean from the plethora of paper-based, individually-held records, become eminently retrievable, searchable and accessible to computer-aided statistical analysis. This provides institutions with the incentive to encourage or compel teachers to make use of digital environments to accomplish learning tasks because in doing so, they assist the institution in impressing public statutory regulatory bodies. Whether this is the *best* way for people to learn or teach remains a moot point and this question is often set aside, with the assumption that 'digital is better' in and of itself, resulting in the kind of 'technological somnambulism' deplored by Winner (2014: 261). Negative dispositions towards technology and digital environments are dismissed as 'luddite' and seen as a weakness of the student or practitioner that must be overcome through greater digital literacy (Rutkowski, 2016).

One way in which learning analytics is becoming operationalised in Further Education is through the growth of 'student dashboard' solutions, in which,

data coming from learning platforms can be made actionable by analysing and presenting it in ways meaningful to different stakeholders... [through] a single display that aggregates multiple visualizations of different indicators about learner(s), learning process(es) and/or learning context(s)' (Schwendimann et al., 2016: 532, 533; and see Ozga, 2016: 74; Williamson, 2016: 4).

The ostensible purpose of this kind of close monitoring of learners is to inform the processes of personal tutoring and curriculum design in ways that benefit the learner. Schwendimann et al., feel justified in asserting that although, 'these fields are still relatively young, their explosive growth already provides enough literature to justify a systematic review' (2016:532). However, in constructing this review, they make the worrying assertion that the

majority of studies address 'general constructs such as usability, usefulness or user satisfaction, while very few studies actually look at (and provide evidence for) the impact of these technologies on learning' (2016: 533). An 'explosive' growth in the take-up of a system that has no convincing evidence base for impact on learning suggests that other, more immediate purposes are being served. A feasible ulterior motive, given the pressure to compete in the marketised arena of Further Education, is that of generating an audit trail of interaction to justify the continued survival of the institution. Public funds are appropriated in the service of the audit of learning rather than its development.

In the same way as the rise in learning analytics and student dashboards can be interpreted as a response to marketisation and accountability, they can also be seen as mechanisms by which institutions and employees become controllable by the state. In fulfilment of Foucault's pre-digital vision of a panopticonised society, the social need for mutual scrutiny and oversight engenders digitalised work, rather than arising out of it;

Our society is one ... of surveillance... behind the great abstraction of exchange, there continues the meticulous, concrete training of useful forces; the circuits of communication are the supports of an accumulation and a centralization of knowledge; the play of signs defines the anchorages of power; it is not that the beautiful totality of the individual is amputated, repressed, altered by our social order, it is rather that the individual is carefully fabricated in it, according to a whole technique of forces and bodies (Foucault, 1991: 217).

The representation of the individual learner within a student dashboard is a fabricated individual and the technique of forces and bodies that constructs her in the digital world. The play of signs is a play of click-throughs, logins, library borrowings, grades and attendance monitoring swipes. The anchorages of power are the funding and inspection imperatives that demand the monitoring of such signs. Whether the beautiful totality of the individual is deliberately amputated or repressed, is arguably lost in this fetishisation of the learner as a set of digital markers. Moreover, the existence of student dashboards compels new forms of work for Further Education educators, requiring they are used consistently across institutions and sectors. Regardless of existing practices for supporting learners according to their individual dispositions and programmes of study, institution-wide policies on dashboard use, with prescribed times and frequencies of dashboard-based meetings, are recorded and accrued on the dashboard. A system that is ostensibly designed to free practitioners from the burden of additional work in collating student data assumes a tyrannical hold over their time and energies and compels compliance, regardless of the impact on learners. The auto-recording of platform usage means that teachers and learners are subject to the 'vigilance of intersecting gazes' (Foucault, 1991: 271) and are compelled to behave as if they are constantly being assessed and inspected.

A further example of the consequences of marketisation, surveillance and control in Further Education lies in the proliferation of e-portfolio solutions. More than 50% of U.S. colleges and universities now offer some form of ePortfolio experience (EDUCAUSE Center for Applied Research, 2013). E-portfolios are a collection of digital artefacts that ostensibly shows a learning journey over time, characterised as a representation of professionalism and professional identity (Malita & Egetenmeyer, 2011). They were developed from the early 1990s by Universities and Adult Education providers for assessing learning and evidencing prior achievement and were initially locally hosted digital collections and later, web based. Because they are eminently shareable and can be commented on or jointly editable, they can be a site for developmental dialogue with teachers and others, what Dominguez refers to as the 'bi-communicating dimension' (2011: 12). Such tutor practices are routinely date-stamped and logged automatically, impossible in paper based portfolios. The development of digital literacy that is potentially stimulated by e-portfolios is mooted as a way to produce the flexible knowledge workers required by the global economy. However, the panopticonisation of teacher activity that e-portfolios afford provides a perverse incentive to engage with learners in this way rather than through alternative, arguably richer media. Face-to-face or phone conversations are not automatically logged and hence 'invisible' to regulatory bodies and institutions. The e-portfolio and its use becomes shaped by auditable requirements, and this is glossed behind its *prima facie* purpose to stimulate learner development and present the scholarly, professional identity of its contributors. Moreover, institutions are required to buy into e-portfolio platforms through licensing agreements. In Marxist terms, and considering education in market terms, the providers of such platforms effectively own the 'means of production' and are able to control how these means are shaped and provided over time. Who does this digitalisation serve? Ultimately, Ofsted measure impact in ways that provide government with a vindication of their policies and with political ammunition they need to retain power. The work of lecturers is co-opted in the service of the political arms of capital and of capital itself.

In the preceding we have brought together two sets of arguments that illustrate the manner in which digitalisation allied to the 'power of numbers' constitutes a technology that serves to recalibrate teachers' work (Hardy, 2015). This is a form of governmentality that is lodged on a very particular terrain, that of a neo-liberal and capitalist state.

'Busy-work' and 'bullshit' jobs

This section may appear to be out of kilter with our earlier discussion, but it offers a particular vantage point from which to view digitalisation and its impact on Further Education teachers. Paradoxically, 'busy-work' and 'bullshit' jobs coexist with austerity and a surplus population that is extraneous to the requirements of capital. This can be evidenced by rates of un- and under-employment, set alongside those jobs that invade the

whole of a person's life. Graeber (2013) associates 'bullshit' jobs with the growth of administrative and pointless work often found in the service sector. In such work large numbers of people carry out tasks 'they secretly believe do not really need to be performed' (np). Teaching would not normally be considered in such terms, though many of the activities that Further Education teachers are involved in have a resonance with Graeber's (2013) 'bullshit' jobs. There is an affinity here with performativity and the surveillance of teachers' work. Ironically much of this has been facilitated by the growth of digital technologies allied to the requirement for on-going accountability as well as the preparation for Ofsted inspection, processes of self-assessment and the like. Glaser (2014), in a commentary on Graeber (2013), suggests,

Work that people find genuinely creative and meaningful... is now often supposed to be done unpaid. While technology has failed to liberate people into a life of leisure, it has succeeded in shunting non-bullshit work into non-work time (Glaser 2014: 88).

The academic labour process would be a case in point, but for many of those who work in education at a time of austerity, intensification and cost cutting, putative non-work time is frequently used to get the job done (Fleming, 2014: 1-2). The irony is that much of this work could be thought of as 'busy-work' necessitated by performative regimes of dubious value that keeps us busy and saps our energy. Perhaps this is why Glaser (2014:83) states, 'a population that is busy and tired is less likely to revolt'. There is another aspect to such processes where we become unduly focused on the institutional and local, and where we can rail in a safe place against the inequities of neo-liberalism, but stop short of wider political engagement. We are reminded of Marcuse's (1965) notion of repressive tolerance, but in two rather different senses. Firstly, and in the light of our previous comment, we can talk amongst ourselves, occupy the moral high ground and describe our practice and engagement in radical terms. We may be voicing our dissent or indeed engaging in *parrhesia* (Foucault, 1983), speaking on behalf of silenced others, writing our blogs and so. These practices also align with a second and slightly more tenuous notion of repressive tolerance, whereby dissent and resistance can facilitate capitalist adaptation. That is, to say capital's appropriation and domestication of dissent (Boltanski and Chiapello, 2007: 27-30). These last points may be somewhat overstated and indeed stand as something of an autocritique. This is of course not denying the importance of workplace struggles but these comments serve as a salutary corrective to an exaggeration of our significance by problematizing what can be seen as 'the self-presentation of moral purity' (Srnicek and Williams, 2015: 8).

Notions such as 'busy-work' and 'bullshit' jobs also draw our attention to the paradox of work. This arises both in terms of research that analyses the labour process of Further Education teachers and that which considers the significance of waged labour for our students and wider society (Avis, 2014 a,b). Waged labour is at the centre of the current doxa and is seen as pivotal to life and well-being. At the same time increasing numbers of

people find themselves part of a surplus population that is no longer required by capital. Yet in recent years the amount of time spent in waged labour has increased and for many workers the distinction between life and work has been eroded (Srnicek and Williams, 2015: 115). This may appear paradoxical but can be seen as the way neo-liberal capitalism can “keep [us] all up to the mark” (Olssen, 2003: 200). Although capitalism celebrates waged labour, and “demands that people work in order to make a living, yet it is increasingly unable to generate enough jobs” (Srnicek and Williams, 2015: 126).

By Way of Conclusion

We have focused largely on the pernicious impact of digitalisation on the lives of Further Education teachers serving as a corrective to more optimistic accounts. The digital affordances that are conscripted in the service of capital to control labour in Further Education lend themselves equally to resistance. Open networks, operating responsively to participation in real time, enabling the recording and sharing of views can become sites for solidarity and counter-narratives amongst Further Education workers. A recent example lies in the creation of the ‘Tutor Voices Community’ on **facebook**. Growing out of the celebration of the resourcefulness, tenacity and integrity of Further Education teachers portrayed in *Further education and the twelve dancing princesses* (Daley, Orr, & Petrie, 2015) this community describes itself as 'a democratic campaigning network for educators in the Further, Adult, Community and Skills sector' (Tutor Voices, 2016). It calls upon its members to respond to policy through lobbying and links to research, to raise awareness of practitioner issues, to promote critical pedagogy and to provide national, local and virtual spaces for practitioners to share ideas and gain strength from one another. The point is that the digital, as with any other technology, can be aligned differently and therefore its enactment is the outcome of political struggle, with all the contradictions that involves.

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