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Postdigital Ecopedagogies of Attainment and Progress

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Abstract

Human attainment is based on a particular model of chronological achievements. People and society are assessed in terms of making progress towards ‘something better’. This approach through modernity sees technology treated as a resource to harness for gain regardless of environmental costs. In education, this linear progress model is mirrored: accessing learning, completing study in a timeframe, attaining an award and progress beyond education. Though Covid-19 has interrupted these components of ‘success’, a consensus that children, students, workers and the economy all need to ‘catch up’ after the pandemic exists, even when people are not catching up from an equal positionality. In this competitive, neoliberal progress model attempts to widen participation in education have only had limited success. Additionally, new convergences between digitalisation and biological sciences now provide a broader world view on relations between technologies, progress and humans (Peters, et. al. 2021). This chapter examines the possible ‘demise of a model of progress based on the old system of arranging living forms into a linear hierarchy’ (Bowler 2021: vii). It reviews related assumptions, and considers implications for ecopedagogies of attainment, when unpredictable developments in technology now begin to alter how we might understand progress itself.

Keywords: progress, McPolicy, widening participation, Covid-19, postdigital ecopedagogies of attainment, political bioeconomic discourse

Introduction

Across the globe attempts to widen participation (WP) in education meet with varying degrees of success. However, this also depends on how we are collectively defining WP, what it means to ‘progress’ in education, and indeed to progress beyond education, in broader life and work. As Bowler points out: ‘any definition of progress requires a value judgement as to the desirability of what is unfolding’ (Bowler 2021). So, who decides – and on what basis, that something desirable has actually been accessed and attained, that important goals have been reached for diverse participants and that these should be rewarded in some manner linked to one particular notion of success?

In recent years, vast funds have been poured into boosting access to Higher Education (HE) and support for student retention and progression. Yet although more students from disadvantaged backgrounds now attend universities those students leaving before completing their studies has risen, alongside the related challenges that dropping out brings for these individuals, for universities and for society more widely (Pope, Ladwa, and Hayes 2017; Office For Fair Access 2017; Social Mobility Commission 2017). This is a situation that is further complicated by universities being highly vocal concerning their commitments to inclusion (Boliver 2017; Kimura 2014) which some have argued has become an end in itself, particularly for elite universities (Baltaru 2020).

The notions of attainment and progress in HE are therefore also increasingly entangled with the agendas of universities to claim that they are addressing issues of equality and diversity. Kimura (2014: 523) has examined how this leads to students becoming ‘raced, classed, gendered, or nationed subjects, while they struggle to form their own agency’. Ahmed

(2007: 590) points to how such acts in HE are part of a ‘new politics of documentation, which takes diversity and equality as measures of institutional performance’. Ahmed suggests that not only is the writing of policy documents that express a commitment to promoting race equality now a central part of equality work there is a tendency for such documents to conceal, rather than address, issues like racism. This is because the ‘doing of the document’ becomes the main focus of progress in addressing inclusivity. Ahmed (2007: 590) advocates going further to ‘follow such documents around, examining how they get taken up’ and to ‘expose the gaps between words and deeds’ within organizations.

If I interpret this as to literally ‘stalk’ such policy initiatives and look for the gaps between what is written and where real change has been evidenced, it is an appealing but also challenging route, particularly given the hybrid, postdigital context that HE now occupies (Jandrić et al. 2018). How to undertake a ‘postdigital stalking’ of policy to track real change is a topic I will look forward to hearing the thoughts of others on. For example, at that moment when we read a tweet or a posting on a social media site from someone in HE about a new policy or framework for inclusivity and WP, should we seek to track down the document itself to read it, and maybe 6 months later revisit any changes that have actually taken place with those who wrote it?

As I have argued elsewhere, this is not easy when most HE policies do not identify their authors, let alone linguistically attribute the academic labour discussed to real human beings (Hayes 2019). Given that we have come to directly connect *access* with *progress* in HE, and to shift our emphasis from tangible ‘structural’ inequities faced by traditionally underrepresented students and staff towards a more superficial stating of ‘organisational commitment’ (Baltaru 2020), there is now a strong case for scrutinising what it really means to ‘attain’ or ‘progress’ for individuals, and for HE institutions. In considering these points, we can also question what it means to fail to progress and what new ecopedagogies of attainment and progress in postdigital contexts might look like.

This chapter therefore examines firstly, the possible ‘demise of a model of progress based on the old system of arranging living forms into a linear hierarchy, the ““chain of being”” (Bowler 2021: vii). It then reviews some of the assumptions we have based on this model of progress and considers implications for ecopedagogies of attainment when unpredictable new developments in technology could now potentially alter how we understand progress itself. In reconsidering ‘history itself as inherently unpredictable and open-ended’ (Bowler 2021: 2), this calls into question our reliance on the current neoliberal model of progress, assumptions and related political economic discourse (McPolicy) in education.

If the old goals we were seeking in society should alter, due to a new circular bioeconomy enabled through new biodigital technologies, then do we need to fundamentally re-think educational policy surrounding how access and attainment is perceived? If so, how might this alter political economic discourse about inclusivity and WP and what might a new political bioeconomic discourse of attainment bring? If attainment is no longer a time-limited, cumulative form of progress, what other shapes might achievement (and indeed failure) take?

The Idea of Progress as Wider Than McProgress

The idea of ‘progress’ is routinely referred to in education and whole nations are judged on the progress they make as societies: ‘the progress of humanity is the general test to which social aims and theories are submitted as a matter of course’ (Bury 1921). Yet in our current neoliberal model of progress, and related political economic discourse, our approach towards the development and attainment of human beings is based on rather narrow values and contradictions, which I have previously referred to as embodied in HE ‘McPolicy’ (Hayes 2019, 2021a). Drawing on McDonaldisation theory (Ritzer 2018, Ritzer, Jandrić, and Hayes 2018) this describes a rational manner of writing institutional policy, in a linguistic structure

that depersonalises human actions and tends to credit non-human entities (such as strategies, technologies and buzz phrases) with tasks that people usually undertake. Such an approach reveals linguistic patterns in policy documents that support a simplified model of learning where decontextualized humans produce and consume. This emphasizes human performance in a disembodied manner that escalates in a way that rather resembles automation in society.

However, problems arise for WP due to assumptions in this linear model of progress, that all individuals will be able to benefit. These issues, where we progress statements rather than people, are compounded further if we simply ‘document’ an idea of ‘access’ or ‘progress’ (Ahmed 2007) and then look to these written statements or policy frameworks, as if these have agency to address WP. Baltaru (2020: 11) points to a rise in this form of ‘agentic inclusion’ where ‘universities’ ‘talk’ about inclusion has become a ‘walk’ of its own, but a walk towards maintaining institutional status as opposed to more direct concerns about enhancing inclusion among underrepresented groups’.

Competition between individuals and their positioning as consumers in a market-led, McDonaldised society (Ritzer 2018) means that some people are from the outset much better placed than others to make progress, as it is defined in the neoliberal model. This makes WP for students from disadvantaged backgrounds a considerable challenge, especially when McPolicy discourse emphasises the measurement of generic forms of ‘the student experience’ (Hayes 2021a) but fails to acknowledge the contextual positionalities of individuals in postdigital society (Hayes 2021b). Furthermore, neoliberalism relies on consumer demand to promote economic growth, but consumer demand and economic growth are now clearly recognised for their contributions to the ecological destruction of our global environment. We are now experiencing multiple effects and impacts from global crises reminding us that ‘[p]olitics and economy cannot be thought of without the environment. Now more than ever, we need to think seriously and creatively about the postdigital pedagogies that can articulate, embody, advance, and debate new presents and futures.’ (Jandrić and Ford 2020)

In order to open debate on new ecopedagogies of attainment, it is necessary to reimagine how all elements of life, inclusive practices and environment are interacting with technology and data, and to move away from the narrow route of McProgress we have set ourselves for too long. As well as attending to the damage we have done to the earth’s ecosystem, we need to review our collective aspirations for education and attainment in a postdigital society. This means reconsidering how progress and potential are currently linked to our diverse ‘postdigital positionalities’ and through an ‘airing cupboard’ of circulating opinions (Hayes 2021b) that also act as agents to either further or hamper social justice. It means allowing students to ‘experience themselves in their potential’ and not routing potentiality towards predefined consumer-focused models of education that promote false divisions and linear chronology (Lewis 2010).

Chronological Progress That Leads to A Better Future?

Progress is generally treated chronologically, or incrementally, like climbing a hill, reaching a certain marker within a given time, or notching up achievements. In education there are patterns that are recognisable: access (a student lifecycle), retention (completing study within a specific timeframe), attainment (cumulative achievements), progression (in and beyond education). These are all considered to be components of student success, along with the broad consensus now that children, students, workers and the economy will all need to ‘catch up’ after the global effects of the Covid-19 pandemic. Such a logic encounters problems though, when people are not ‘catching up’ from an equal positionality. As we entered the Covid-19 crisis, we relied heavily on digital technologies to support emergency remote teaching (ERT) but it has been argued that we were, at the same time, risking an entrenchment of existing inequalities.

Wright, Haastrup, and Guerrina (2020) suggest that responses by universities to the pandemic have exacerbated ‘ontological insecurity among minoritized groups, including women’. They point out that when coupled with increased caring responsibilities, this calls into question who can be creative and innovative, and the necessary conditions for knowledge production. They add:

While university managers seek to reassure university staff of the temporary nature of COVID-19 interventions, we argue that the possibilities for progressive leaps at a later state of institutional regeneration is unlikely when efforts to address structural inequalities are sidelined and crisis responses are undertaken which run counter to such work. (Wright, Haastrup, and Guerrina 2020)

Such concerns though do not sit easily with educational policies and reports that look towards a future that progresses from the past relying on patterns of progress that appear to have gone before, and assuming that what lies ahead will always improve on this. Both the pandemic and widespread digitalization have displaced the human-centric aspects of such an approach towards modernization which is underpinned by an assumption that human mastery of the natural and social worlds will lead to greater freedoms and benefits. The discussion of successive industrial revolutions and a categorization and sequencing of periods of historical time according to technical advances in how humans produce things, places technological innovation as a driver of momentous change.

These technological breakthroughs range from the industrial revolution in the eighteenth century and the invention of the steam engine, the later generation of electricity to the more recent digital revolution, with discussions of a Fourth Industrial Revolution characterized by a fusion of technologies that are blurring the lines between the physical, digital, and biological spheres (Schwab 2015). Subsequent discussions of what appears to be a trend of accelerating automation have raised concerns of mass technological unemployment and new related questions on the role of education against this backdrop (Peters, Jandrić, and Hayes 2018).

Yet there are now reasons to question too whether these former linear models of progress can even be relied upon, or whether they were ever really there in the first place. Not only has the Covid-19 pandemic brought about considerable shifts globally, in our postdigital-biodigital society, a convergence between digitalisation and biological sciences is also observed, which can provide us with a different and more open ‘[w]orld view which encompasses various reconfigurations between technologies and humans. This applies to all kinds of technologies, including but not limited to biodigital technologies.’ (Peters, et. al. 2021c: 3)

Educational Assumptions of Progress in McPolicy and *The Scala Naturae*

The idea that humans will progress or advance towards pre-defined goals within a linear and temporal model of development has been a long-held view in education. McPolicy discourse reflects how education has come to be valued for its direct contribution to this particular vision of progress. In our current global model of neoliberalism there is also a strong focus on learning as an individualistic concept. Students are measured in relation to how well they progress towards attaining preconceived models of ‘excellence’ and institutions are audited and rated on their role in supporting this particular vision of human progress (Hayes 2021a; Shore and Wright 1999).

In recent years the regulatory bodies that oversee the work of educational institutions have increased the categories of activities that they measure progress against. In a recent Office for Students (OfS) consultation (2021) on their proposed strategy for 2022–2025, there are 38

mentions of ‘progress’. The OfS are the regulator for English universities, and they specify two areas of HE where they ‘will focus over the next strategic period’. The first is ‘quality and standards’ (including graduate outcomes, performance above what is expected from an existing Teaching Excellence Framework and freedom of speech) and the second is ‘equality of opportunity’ (covering WP, diversity of courses offered, mental health and wellbeing, harassment and sexual misconduct). The OfS state that ‘we believe our focus on these two areas will be the most effective way to progress our mission’ (Office for Students 2021: 23). Whilst these aims to ensure that both quality and equality are prioritised for students remain important, there are questions to be raised concerning how the interests of students are determined.

In a recent collective article for *WonkHe*, that questions whether OfS is the right regulator for the times we now live in, Paul Ashwin argues that

Often the Department for Education (DfE) appears to have determined what students ‘real’ interests are. It is significant how many OfS press releases focus on issues that reflect the priorities of ministers rather than student representatives – grade inflation, grammar and spelling, ‘low value’ courses. This is not to imply these issues are not of interest to students, but it is concerning that they are framed in terms of the government’s agenda rather than diverse priorities of students. (Ashwin 2021)

The diverse positionalities of students, educators and indeed policymakers in postdigital society (Hayes 2021b) tends to be overlooked when generic agendas and the ‘missions’ of regulators are prioritised. What also seems to remain problematic is the assumption that such policies can ‘drive progress ... focusing on securing compliance with our minimum requirements is the most proportionate way to drive progress towards attaining our overall mission’ (Office for Students 2021: 23).

These assumed patterns of attainment, underpinned by the notion that policymakers can drive progress, have come to structure how education is discussed in HE McPolicy (Hayes 2019). McPolicy discourse embodies rational assumptions about how humans will progress through education in a language that reflects the forms of efficiency, calculability, predictability, and control that Ritzer (2018) described as defining neoliberal, McDonaldised society. It is assumed that it is possible to ‘measure the excellence’ of something universities can ‘deliver’ within a certain time frame and offer, referred to as ‘the student experience’ (Hayes 2021a). This has led also to an irrationality, as linguistically, the active academic labour of human beings seems to be missing from this policy discourse (Hayes 2019). Even amid new campaigns to emphasise equality and diversity agendas in education, progress is still generally treated chronologically, or incrementally. Within this approach, technology is discussed as a simple tool to drive educational progress forward and improve on what has gone before.

Peter Wagner (2012: 28) places such associations in the wider context of modernity, when he argues that this ‘idea of progress emerges in the late eighteenth century, and it gives rise to the view of a coming – bright – future that disassociates itself from the – often miserable – present’. This also links with an idea that our children should have better lives than ourselves, which Wagner points out, has persisted as part of the concept of progress across time. Ada Palmer (2017: 319) questions: ‘[I]s progress inevitable? Is it natural? Is it fragile? Is it possible? Is it a problematic concept in the first place?’

In Peter Bowler’s broad examination of the notion of ‘progress’ and the changing structure of this idea through history, he considers the biological, social and technological applications. Rather than a continuation of the *scala naturae* (the great chain of being) where progress is understood as a ‘built-in historical trend that will continue into the future’ (Bowler 2021:1), it is argued that new insights might be gained by looking across disciplines and

history. ‘There are parallels between the changing views in evolutionary biology, in archeology and anthropology, in studies of modern history and in how we think about the future.’ (Bowler 2021: 271)

Debates and Underpinning Assumptions

Bowler raises two debates that are worth reflecting on in terms of what underpinning assumptions we are basing our current ideas of attainment and progression in education on. These two positions have different connections with how we might understand historical development and therefore how we might think about future progress. Either we see human development as a linear, goal-directed model of progress in a temporal chain of being [the framing which seems to be underpinning HE policy discourse, as in the Office for Students (2021) strategy], or Bowler suggests, more like evolution, whether biological or social, where progress is ‘a branching tree of developments, which had no predetermined goal’ (Bowler 2021: 271).

The latter way of envisioning progress involves reinterpretation of the history of the idea of progress. As such, it ‘unchains’ former ways of thinking and enables us to look with fresh eyes at the idea of progress as open-ended and unpredictable. It can be helpful to examine the more ecological, branching and open-ended vision of progress (and linked to this attainment) in the light of what a bioeconomy may offer as a shift from neoliberal economy.

This approach has different temporal interpretations and biodigital implications to consider in a postdigital society where numerous convergences across disciplines can be observed. The Covid-19 pandemic has surfaced many questions too. For example, rather than an assumption that some students are behind others and need to ‘catch up’, a more wide-open perspective might place value on other things that those students have been doing, experiencing or contributing. This helps us imagine alternative more sustainable political bioeconomic futures in which progress and attainment might take on different forms. It therefore has implications for reimagining policy and related McPolicy discourse.

Temporal Assumptions and Postdigital Convergences

In our current political economic context, the structuring of education seems to be based on an assumed continuation of the *scala naturae*, rather than a questioning or ‘unchaining’ of this model. The passage of time in relation to technology and learning can be observed in the paradigm of 24/7 teacher/student availability and an acceleration of study programs and research, because ‘these themes are dialectically intertwined with human learning in the age of global neoliberal capitalism’ (Hayes and Jandrić 2017: 11). Time has even been discussed as the ‘fourth dimension in the globalisation of higher education’, due to the experience of compressed time and a perception of ongoing pressure for academics to master time (Walker 2009: 483). This treatment of time is as if it were a reified resource, or an investment that is definable and exchangeable.

A commodification of time has accompanied the establishment of capitalism to pervade our lives, our language, our education institutions, and our teaching and learning (Walker 2014). As modern global capitalism has progressed from industrial production to incorporate new digital technological innovations and knowledge-based economies there are assumptions too that technology drives our accelerated experiences of time (Hayes and Jandrić 2017). This isolation of technology as a driver or force is no longer a sustainable logic when the multiple dimensions of time intertwined with digitalisation are experienced intimately and contextually by individuals (Hayes 2021b).

This calls into question ongoing institutional processes in education where linear attainment points and related awards within disciplines remain largely unchanged across decades, and digital technologies are simply treated as neutral platforms to support this model.

Fundamental and different technological convergences globally demonstrate a need to rethink these assumptions. A discussion of these changes as ‘postdigital convergences’ requires a little explanation though when the placing of ‘post’ ahead of any term tends to also infer a linear progression from one thing to another. Early conceptions of a postdigital condition were based on the idea that what is digital has simply blended into the background of our lives only to be noticed whenever it is absent (Negroponte 1998). However, more recent postdigital theory focuses on the idea that digital technology, media and data are not separate, virtual, or ‘other’ to a ‘natural’ human and social life. Postdigital life is viewed as unpredictable and inclusive of both digital and analog, technological and non-technological, biological and informational (Jandrić et al. 2018: 895).

Bioinformation and biodigitalism are now intrinsic parts of the postdigital idea, which strongly critiques the concept of the digital in education as a technological fix (Peters, Jandrić, and Hayes 2021c). Postdigital interpretations enable us to re-examine technological, cultural and evolutionary shifts across time and to reinterpret the ways in which we are viewing human progression and attainment, including our focus on WP.

Environmental Assumptions and Success as Progress

In the linear, goal-directed model of progress the assumption is that progress looks like success. As Wagner (2012: x) has observed, it was once common to think that modernity would lead to a bright future based on reason and hopes of opening up a new and better era. Such Western beliefs have since been challenged as globalisation has revealed the effects of mass consumerism on the global environment through exploitation of complex ecological systems. Neoliberalism has treated environmental resources primarily as commodities, with McDonaldised practices in businesses and institutions leading to humans being discussed in the same manner.

The emergence of bioeconomy is now presenting alternative and more holistic approaches towards technological progress that could help to alter our course from the damaging route we have taken towards a more sustainable economy (Peters, Jandrić, and Hayes 2021b). Now that the ecological destruction of our global environment is clear, it is necessary to consider the role of failure in modernisation as well as the hopes of success. The lack of sustainability of modernity as it has emerged as a single, Eurocentric model of consumption is now confronted with questions of how the freedom of global citizens relates to the freedoms of the buyer and seller (Wagner 2012: x). Wagner adds that ‘the current constellation of modernity forces us to reconsider our ways of theorising it’. Therefore can we sustain the dominant idea of progress ‘if modernity has more than one shape and goes on changing’ (Wagner 2012: xi) and are there new ways we situate the modern experience in time and space (Wagner 2012: 153)?

This leaves something of a dilemma if we need to rethink the foundations of progress, because within the educational assumptions of attainment in McPolicy there is little mention of failure. This is a point that Felicitas Macgilchrist raises when she asks: ‘[H]ow does *failure* figure in imaginations of digital futures, as higher education is trying to make the world a better place?’ (Suoranta, et. al. 2021).

Technological Assumptions and Failure in A Neoliberal Context

Macgilchrist raises the issue that the EdTech industry orients primarily towards ‘success’ and that ‘[d]igital technology will—in this view—help students to reach their potential, enable instructors to support, motivate and teach successfully, and facilitate institutions to lead their faculty, staff, and students into a successful future’ (Suoranta et al. 2021). This reproduces a

linear path towards a future that looks bright for successive generations, but Macgilchrist questions: ‘What counts as ‘success,’ and for whom? Whose priorities are being imagined?’ Furthermore, Macgilchrist questions if there will be room to consider the ‘queer art of failure’ (Halberstam 2011)?

Macgilchrist distinguishes between the place of failure in the linear, goal-directed model of progress, where the idea of ‘learning from mistakes’ is an imperative in educational and EdTech spaces, and we reflect on our mistakes, and move onwards to success. She contrasts this with the queer art of failure as a struggle for *other* futures, which is about ‘critically assessing the politics and positionality of achievement; about exploring how failure is both bleak and hopeful’ (Suoranta et al. 2021). Taking this approach towards failure even further, Macgilchrist (2021) argues that there are even pleasures that might be acknowledged, as we confront failure as a form of resistance to systems of values that prioritize achievement and success.

Shifting ways of thinking about progress in this broadest sense raises questions about the reasoning that is often adopted to support technological advancement in neoliberal society, and also in education. When technology is treated, on the one hand, as an efficient way to fix societal processes, to enhance teaching or to measure ‘excellence’, there may on the other hand, be an omission of related consequences. Deterministic assumptions that are made about technologies and their links with inevitable improvements and linear forms of progress tend to view technology as an independent entity from the social and political context in which it was designed and deployed. This overlooks the different ways in which people might experience technology, as well as treating it in isolation from commercial ownership and control. This is a situation that with digital technologies has now become closely related to the collection and use of all kinds of data, to new algorithmic cultures and the intimate role that internet-based data-driven platforms have assumed in peoples’ lives.

Assumptions About Educationalization and ‘Harnessing’ Technology and Data

A quick Internet search around the idea of ‘harnessing technology’ or ‘harnessing data’ reveals that this is a concept that has sustained across all kinds of societal institutions. Treating technology and data as if these are impartial entities or resources to be brought in or ‘harnessed’ in order to ‘fix’ a business, health or education system, is a form of ‘solutionism’ that has only increased during the pandemic. In education this may be accompanied by a narrative claiming: ‘education is broken, and it should and can be fixed with technology’. Yet, ‘such technologization, often seen as neutral, is closely related to educationalization, i.e. imposing growing societal problems for education to resolve’ (Teräs et al. 2020, Peters, Jandrić, and Hayes 2018). The irrationality of a rationality that simply places WP issues into this existing political economic context, and within a commodified vision of progress, emerges when these concepts prove to be incompatible.

Rather than create a supportive learning ecology where diverse routes are possible for the different postdigital positionalities and levels of disadvantage people find themselves in (Hayes 2021b) WP has instead become constrained in a narrow and competitive consumer environment where not everyone can attain. Despite much investment in WP over recent years, including outreach interventions and attempts to ‘raise aspirations’, there is still a lack of evidence of impact on enrolment rates (Robinson and Salvestrini 2020: 5) and harnessing technology and data in the current model of educational progress does not look set to resolve via ‘sat nav learning’ (Beattie and Hayes 2020).

The datafication of society within the neoliberal model of progress tends to be seen as another tool ‘for enhanced efficiency, security and innovation’ but there is also an increasing concern with ‘[t]he multiple ways in which datafication both introduces and entrenches key

questions pertaining to a broader concern with social justice, such as issues of inequality, discrimination, and exclusion' (Dencik, Jansen, and Metcalfe 2018). The concept of 'data justice' is raised by these authors in response to the issue of simply treating data as another 'resource', that might be harnessed to support efficiency and progress. They point out that 'it is not clear, in this datafied society, where, and of relevance to whom, data is located, travels and impacts' (Dencik, Jansen, and Metcalfe 2018).

Postdigital Stalking of Policy Commitments to Identify Progress

This adds to the challenges of undertaking a 'postdigital stalking' of policy commitments that are written, tweeted, spoken, datafied and easily dispensed with, because it is not only humans who are mobile, data of all kinds, is too. Data of all kinds slips with silent ease between physical and virtual locations and public and private spaces. Any bias contained therein can also intersect with and influence the best laid plans to be inclusive. Thus, I have previously identified a pressing need for university policies aimed at equality, to also address matters of data and digitalisation (Hayes 2021b). Accompanying an approach that assumes that data-driven technologies will automatically enhance teaching, collect analytics that support student engagement or measure student progress, is the problem that students are frequently treated as if they are of one universal identity (Hayes and Jandrić 2018). Indeed, the student body can come to be referred to as just another data source when institutions seek to quickly demonstrate progress with WP. A postdigital stalker of policy would therefore need to ask detailed questions about why some forms of data (and not other kinds) had been collected, selected and referenced.

Furthermore, in environments, around each of us are new developments where data is underpinning technologies that are altering our cities, homes and places of learning. These developments will also have impact on WP initiatives and how students access HE at various points and make progress. Bibri (2021) points out that advances in big data computing 'have brought new visions on how cities as a microcosm of societies will evolve and the kind of opportunities that will be created and explored in the context of sustainability'. However, the contributions of new technologies to the global goals of sustainability are still positioned in a particular broader debate over the role of science-based technology in societal development. Given that there are now complex intertwined societal factors - in terms of materialization, success, expansion, and evolution - that underly data-driven smart sustainable urban environments, there is a need to:

[f]acilitate collaboration among different disciplines for the primary purpose of providing the theoretical underpinning and interactional knowledge that are necessary for a more integrated and broader understanding of the phenomenon of data-driven smart sustainable/ sustainable smart urbanism. (Bibri 2021: 18)

With such examples in mind, critically reflecting on how datafication is now operationalised in the linear, efficient progress model is crucial, if we hope to further matters of social justice and WP in universities.

Disrupting the Very Grammar of Justice

If datafication now 'disrupts the very grammar of justice' (Dencik, Jansen, and Metcalfe 2018) then its place in imagining new ecopedagogies of attainment and progress in postdigital contexts, alongside new forms of policy discourse that might emerge is important. In a context of datafication, Couldry & Mejias (2019 :3) suggest that 'there is a capitalisation of life without limit'. They argue that whilst much focus has been placed on whether digital labour is being exploited, via 'data colonialism' ever more layers of human life, such as work, school, health,

are now being appropriated ‘potentially for profit’ (Couldry & Mejias, 2019 :5). Therefore, to ‘situate datafication in the context of the interests that are driving such processes, and the social and economic organisation that enables them’ allows societal implications and social justice concerns to be examined (Hintz, Dencik, and Wahl-Jorgensen 2018). It permits questions to be asked about how these issues might look different in a bioeconomical political economy and how this may in turn, alter the relating discourse. How may a new circular bioeconomy and more globally sustainable ways of existing, alter how progress is perceived in society and in turn change how we understand attainment in education?

If there is no longer a McDonaldized culture of waste and replacement and disposable McPolicy churned out in education, perhaps the ‘chain of being’ would be disrupted. Our old system of arranging living forms into a time-limited, linear hierarchy may begin to look more ecological and open ended. If data and digital resources are not so much harnessed as part of a competitive market, but instead examined in terms of data justice, then inclusivity and WP may take a different shape amid new ecopedagogies of attainment, achievement and even failure. Amid such a shift our long held ‘reasoning’ about attainment and the foundations we have based it on in modernity could be called into question.

From A Neoliberal Model of Progress Towards Bioeconomical Progress

Reflecting on the old linear notion of progress model, we have taken a wasteful, disposable stance as we have constantly swapped one existing thing, for the next new thing to support a neoliberal economy. This is not helpful in a new environment of postdigital convergences, where everything old and new remain present, in a messy, hybrid, inclusive fashion. Recent scientific changes that include biodigital convergences between biology, physics (nanotechnology), and information science, are reconfigurations that ‘are dialectically intertwined with a strong technologization of today’s sciences’ (Peters, Jandrić, and Hayes 2021b). As technological development has now taken the lead in scientific inquiry, ‘scientific theories now have more practical applications than ever. Recently published collaborative volume, *Bioinformational Philosophy and Postdigital Knowledge*, explores the many ‘philosophical and social implications of this great convergence at length’ and concludes: ‘In the context of the bioeconomy, we need to turn to its new practical applications now that humanity has scope for environmental self-renewal and enhancement, which is key to sustainability.’ (Peters, Jandrić, and Hayes 2022)

In failing to be sustainable in the linear progress model (as our landfill sites and many other assaults on our environment reveal) there has been a tendency to hid this failure behind a neoliberal rhetoric of a pursuit of excellence and attempts to harness technology and data, as if these might be driven by humans. Those who have worked in HE long enough will also recall the writing and discarding of strategies and frameworks that could occupy a sizable ‘policy landfill’, ‘junk email’, and deleted items space on each of our laptops. Rather like the throw away McDonalds coffee cups and other fast food packaging, in education McPolicy we have repeated these patterns of replacement, writing empty disconnected statements about what buzz words and phrases will enact. In this model of success and progress WP has struggled.

The global crisis we now face in our environment has though prompted progress towards climate targets and international collaboration based on biodigital technologies and their implications and contributions to the bioeconomy (Organisation for Economic Co-operation and Development 2009; Peters, Jandrić, and Hayes 2021b). With arguments that the convergence of bio-, nano-, and information technologies, alongside neuro- and cognitive sciences could be a scientific transformation as powerful as the Industrial Revolution (Salter et al. 2016), we have the emergence too of bioeconomy, and new related policy frameworks

(Peters, Jandrić, and Hayes 2021b). The bioeconomy involves approaches towards environmental self-renewal that include moving to fossil free materials and replacing carbon intense products such as plastics, concrete, steel and synthetic textiles with renewable biobased materials that can outperform carbon-intense materials (Palahí, Hetemäki, and Potočnik et al. 2020). Crucially, as these authors demonstrate, it involves ‘connecting the dots’ in replacing a quantity-oriented, profit-driven economy with an economy focusing on delivering people’s needs in a holistic and sustainable way and it ‘cannot be articulated through separate policies as currently presented’. The authors conclude: ‘The bioeconomy can be a catalyst for systemic change to tackle holistically the social, economic and environmental aspects currently not yet addressed coherently.’ (Palahí, Hetemäki, and Potočnik 2020)

Given that the bioeconomy is considered fundamental for inclusive prosperity and fair social transition and able to address our past failures in the former model of progress, it would seem worthwhile to imagine how such an ecological and economic shift might also alter our policy and related discourse for inclusivity and WP in education. If the bioeconomy can help us to build new synergies between technology and nature to benefit society, then alongside such a shift we need new synergies between technology, education and related policy discourse, that lead to inclusive and sustainable models for WP.

From Political Economic Discourse in Education to A Political Bioeconomic Discourse

A political bioeconomic discourse could provide room for a review of the ‘politics and positionality of achievement’ (Suoranta et al. 2021). Out of an acknowledgement of our former failures, a new appreciation could arise for digital technologies and data and the ways in which these are now experienced from the earliest of ages in contemporary digital culture (Gennaro and Miller 2021) and throughout life and learning. A new understanding of the relational, rather than linear nature of humans and all that surrounds them is also ‘central to the development of an ethical perspective that is built around the significance of care and participation in all our lives’ (Barnes, Gahagan, and Ward 2018). Currently we seek to promote and measure the success of WP in narrow ways that aim to punish universities where they fail to retain students or to recruit diverse cohorts. Less attention has been paid to the political economic context and linear model of progress that has conspired against efforts to improve inclusivity. In this model we fail to attend to the relational nature of disadvantage as it connects with systems where only some people can make progress. We even distract ourselves from the structural inequities within neoliberal political economy by producing isolated frameworks, slogans and training courses in HE that focus on perceived shortfalls in people, and not systems and structure. Such a narrow focus on WP, and measuring average income returns for example, could be replaced with a wider conversation concerning the role of universities and their social benefit (The Sutton Trust 2021) in a postdigital society.

Taking account of our postdigital lives in an ecopedagogical context, our individual or collective failures do not need to be rapidly dismissed, so that we simply move on to attain the next milestone. Instead, they can become part of a critically disruptive ecology, that imagines these transgressions differently and values each person’s positionality (hooks 1994: 11; Hayes 2021b). As we face the reality that even our skills to drive vehicles are now called into question with the development of self-driving cars, we can take a moment to challenge the human centric lens through which we have long viewed progress.

Looking again at what an ecological lens on progress reveals is liberating as the possibilities for new relationships of respect emerge. Addressing a ‘past dichotomy between economy and ecology that very much defined the 20th century’ through bioeconomy refocuses our attention to synergies (Palahí, M., Hetemäki, and Potočnik 2020). When synergies, rather than replacements, are the focus then attainment looks, sounds and reads different. Working

towards more sustainable global society through green deals and bioeconomy alters the dialogue and a McPolicy style of writing about human endeavours is no longer relevant:

Bioeconomy is evolving from the mostly policy and industrial drive toward a more active inclusion of societal issues such as: investing in education and research; favoring a healthy and innovative industrial environment and, promoting a genuine dialogue with all societal stakeholders related to bioeconomy. (Aguilar et al. 2020)

If I imagine a political bioeconomic policy discourse, I envisage less of a ladder or chain of being, that we rush along - with a McDonalds in our hands - writing McPolicy that replaces the former with what comes after. I picture more of a branching network of paths that are ecological, with relational postdigital positional connections, enabling people to join from wherever they are, in a genuine dialogue with all societal stakeholders, as discussed by Aguilar et al. (2020).

In the context of teaching, Arantes (2021) suggests exploring postdigital teacher identities is a liberating praxis. Drawing close links with the notion of postdigital positionalities working within cages of educational technology consumption (Hayes 2021b), Arantes (2021) argues that ‘postdigital teacher identities could begin to disrupt and fragment patterns of teachers as active and cognizant consumers of educational technology’. This suggests that amid new postdigital ecosystems determined by the bioinformational reconfigurations taking place around us, there will be opportunities to link new forms of pedagogical research, practice and policy discourse to the challenges of our pandemic Anthropocene moment.

Currently university agendas or frameworks aimed at inclusion and WP remain biased in themselves towards a model of progress that is unsustainable. These flawed approaches towards addressing all manner of inequities will simply linger (on the shelf or the hard drive) as disconnected McPolicy (Hayes 2019a) until we actively join up the dialogue. In postdigital society, each individual positionality matters and exclusionary McPolicy discourse is no longer an option.

We are not ‘chained’ to our current political economic model of progress. We can now closely examine ‘political bioeconomy’ as a new, or extended field of thought, or alternative way that society is organised. The new discourses and related behaviours that might now emerge through political bioeconomy give promise of a new sustainable environment for much wider models of WP and inclusivity and an opportunity to reimagine progress and attainment as ‘unchained’ and ‘uncaged’ in new forms of political bioeconomic discourse.

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