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Being more human: rooting learning analytics through resistance and reconnection with the values of higher education

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Abstract

Universities are now compelled to attend to metrics that (re)shape our conceptualisation of the student experience. New technologies such as learning analytics (LA) promise the ability to target personalised support to profiled 'at risk' students through mapping large-scale historic student engagement data such as attendance, library use, and virtual learning environment activity as well as demographic information and typical student outcomes. Yet serious ethical and implementation issues remain. Data-driven labelling of students as 'high risk', 'hard to reach' or 'vulnerable' creates conflict between promoting personal growth and human flourishing and treating people merely as data points. This article argues that universities must resist the assumption that numbers and algorithms alone can solve the 'problem' of student retention and performance; rather, LA work must be underpinned by a reconnection with the agreed values relating to the purpose of higher education, including democratic engagement, recognition of diverse and individual experience, and processes of becoming. Such a reconnection, this article contends, is possible when LA work is designed and implemented in genuine collaboration and partnership with students.

Article

We live in uncertain, unpredictable and super complex times, which, as Ron Barnett writes, produce a 'fragility in the way that we understand the world' (2000, p. 257). Indeed, if the world and the society contained within it are part of an open, indeterminate, 'messy' (Law, 2004), and thus unpredictable but self-organising system (Prigigone & Sten- gers, 1984), how might our universities resist the lure of developments in technology, such as learning analytics (LA), that seek to 'tidy up' this messiness but, at the same time, risk diminishing the underpinning values of higher education? This article argues that the popularity of LA as a solution to the 'problem' of student retention, experience and performance (Olmos & Corrin, 2012) fails to attend to the complexities of collective and individual existence. Shaped by historical drivers for the massification and marketisa- tion of HE as well as the current, fundamental tenants of neo-liberalism that position English universities as 'schizophrenic transnational business corporations' (Shore, 2010, p. 15), universities routinely fail to account for students' 'continual change[s] of form' (Bergson, 1911, p. 301) and the 'processes of becoming that are fostered in a culture of affirmation that acts through either empowering or confining powers' (Braidotti, 2012, p. 173). Students who transition through university thus emerge in and through educational processes in unique and unpredictable ways (Biesta, 2010; Postma, 2016).

What is needed in Higher Education (HE) is an 'alternative work model' (Freire, 2007, p. 4) that recognises our complicity in the neo-liberal world. Here, we reject both the concept of student as consumer or product of HE, as well as the liberal tradition of students as apprentice academics in search of knowledge for its own sake (Fanghanel, 2011; NUS, 2012). In their place, we argue for a transformational conceptualisation that is founded on the values of democratic engagement, meaningful dialogue and co-operative working to support personal growth, human flourishing and positive contributions to the world around us. Thus, LA needs to be recast as a

tool that *promotes,* rather than replaces, respectful, personal dialogue. Furthermore, by responding compassionately to students through democratic engagement, the purpose and value of HE can be reconnected to a commitment to human flourishing and growth - to be more human.

The context for metrics for England

Massification within HE is a global phenomenon to serve the knowledge economy. Here, 'post-industrial economies compete and trade ideas, knowledge and information for high- value return' (Ball, 2017, p. 25; Organisation for Economic Co-operation and Development, 1996). This drive for increased participation in HE can be identified within the United States (US) and Canada at the start of the 1960s, Western Europe and Japan during the 1980s, and more recently, South and East Asia (Tremblay, Lalancette, & Rose- veare, 2012). Universities are, therefore, seen as 'vital to economic sustainability and success' (Dill & Van Vaught, in Tremblay et al., 2012, p. 16) in environments that position the neo-liberal principles of 'economic deregulation, liberalised trade, quantifiable outcomes and privatisation' (Hursh & Hall, 2008, p. 561) as 'central, systemic organising principles' (Rudd & Goodson, 2017, p. 2).

From the post-war rhetoric of the *1942 Australian Commonwealth Reconstruction Training Scheme* (Gale & Parker, 2014) to the more recent *Review of Australian Higher Education* (Bradley, Noonan, Nugent, & Scales, 2008), the low-income grants package announced by the Japanese Education Ministry in 2018 (Kakuchi, 2018) and the Chilean *Short Tuition Free Act 2015* (see de Gayardon & Bernasconi, 2016), providing an accessible university sector remains high on government agendas across the globe. As with countries such as Australia, Japan and Kenya (Marcucci & Johnstone, 2007), recouping the cost of widening access to HE in England to establish a return on investment has been achieved by introducing ever-increasing tuition fees (Connell, 2019). Rather than promoting the view that education is a continuous, lifelong process (Myers, 1960), these fees ultimately position the student as a consumer (Hursh & Hall, 2008), and education as a product. Furthermore, the pervasive nature of neo-liberalism continues to perpetuate managerial structures that mirror the corporate world's necessity for measures of
performativity that are concerned with quality control, cost, standardisation and predictable performance (Ball, 2017; Connell, 2019; Kamens, 2016; Welch, 2016). Such positioning distorts the value of university education and produces those 'schizophrenic transnational business corporations' where competing, multiple communities *within* the organisation cause a sense of fragmentation' (Shore, 2010, p. 15). Universities globally appear to have replaced the original culture of open intellectual inquiry, debate and deep learning with an institutional pervasive focus 'on performativity ... strategic planning, performance indicators, quality assurance measures and academic audits' (Olssen & Peters, 2005, p. 1).

In England, contested sector-wide non-continuation and completion retention statistics contribute to the rating of universities as gold, silver or bronze within the Teaching Excellence Framework (TEF). The newly formed market regulator, the Office for Students, requires institutions to robustly measure their activities through quantified data, thus representing a fundamental re-positioning of HE in relation to the market and perpetuating a financial value of university (see Gyimah, in Drew, 2018) that is underpinned by what Lilley and Papadopoulos (2014, p. 972) call 'biofinancialisation'. This presents the aim or value of participating in a university education - or indeed the recruitment of students into the university - as an essentially financial valuation or transaction, and depicted as more important than any other moral, ecological, cultural, material, utility and/or aesthetic value. Indeed, due to an 'espoused moral duty to support student completion created by the high cost of participation' (Broadfoot, cited in Thomas, 2012, p. 1), and the impact that undergraduate non-completion and continuation has on institutional income and reputation for the TEF, universities *must* focus on issues of student retention and performance. Unsurprisingly then, there has been great interest in the potential of LA to assist universities in achieving their institutional goals. The Society for Learning Analytics Research (2019) defines LA as the 'measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs'. Invariably, this involves viewing attendance in particular as an indicator of student engagement and subsequent attainment (see Alija, 2013; Allen, 1999; Tindell, 2016). Whilst serious ethical issues remain in the gathering, manipulation and deployment of such data (Slade & Prinsloo, 2013), the literature review conducted by Yin-Kim Yau (2018) identifies that such work to date focuses on the performance of students, and the subsequent identification of those deemed, in order to

improve student retention, completion and degree classification. Thus, the value of HE as a voluntary process to develop criticality 'a way of being, knowing and acting' (Lea, 2016, pp. 114-118) rather than simply enacting presenteeism (MacFarlane, 2016, pp. 81-82) is overshadowed.

The problem of student retention and performativity

Within the UK's university sector, student persistence is commonly understood and measured as *student retention* and concerns issues of power, ownership and control of the student (Parkes, Mathias, & Seal, *in press).* Historically, in the UK, the visibility of this concept began within universities through the Higher Education Support Act (HESA) in 2003 and the establishment of the Higher Education Funding Council for England (HEFCE) following the 1992 Further and Higher Education Act. Thus, student
retention, as one of the key performance indicators measured by HESA on behalf and now part of the Teaching Excellence Framework, is defined in two ways:

(1) . The completion [or success] rate: the proportion of starters in a year who continue
their studies until they obtain their undergraduate qualification, with no more than one consecutive year out of higher education.
(2) . The non-continuation [or retention] rate: the proportion of an institution's intake,
which is enrolled in higher education in the year following their first entry to higher education [on an undergraduate course]. (HEFCE - cited in National Audit Office - NAO, 2007, p. 5).

Whilst such definitions pervade the sector as performativity measures in the neo-liberal era, they remain limited (Thomas, 2011). Rather than being concerned with an individual's experience and potential transformation as a result of engaging in higher education, they are underpinned by concerns of sustainability and fed by an espoused moral stance in relation to high tuition fees (Broadfoot, cited in Thomas, 2012) alongside institutional performance in a commodified system. They focus only on the institutional need for students to continue with their studies and do not allow for complex student lives (Naylor, Baik, & Arkoudis, 2018) and trajectories, which might include periods of suspended study, the need to retake levels of study, or the need/desire to leave (Parkes, Mathias, & Seal, 2018).

Early models of student retention positioned the student in deficit, rather than considering how a student's other material or organic experiences may affect subsequent choices (Parkes et al., 2018). As such, assumptions are constructed about the student's pre-existence; on their demographic attribute or ability. Such approaches frame the problem of student retention as due to prior educational attainment, class, ethnicity, familial circumstance, physical or mental health (Cvetkovski, Jorm, & Mackinnon, 2018), academic and associated aptitude, resilience/coping (Ayala & Manzano, 2018; Vizoso, Rodriguez, & Arias-Gundin, 2018), and/or economic status (Parkes et al., 2018). Moreover, such categorisations as Black, Asian and Minority Ethnic (BAME), Working Class or First Generation are problematised in retention discourse. The use of such categories has the potential to 'pathologise group members, reinforcing categories of difference' (Meeto, 2017, p. 22), that then might result in a 'self-fulfilling prophecy' (Quinn, 2004, p. 63). Indeed, the final Office for Fair Access briefing discusses how discourses such as the *BAME attainment gap* do not recognise the 'complexity of ethnicity or of disadvantage; nor do they recognise how different ethnic groups bundled together as BAME are represented across different institutions and/or subjects' (Meeto, 2017, p. 7). Such discourses via labelling reify that students are 'in need of fixing and ignore the essentially messy realities' (Law, 2004, p. 7) that are experienced within courses of study, and constituted within a 'myriad of organic, material and social processes' (Coole & Frost, 2010, p. 10). Osberg and Biesta (2007) frame such discourse as *complexity reduction:* one that denies the unpredictability of the real. This reductive process situates the problem of student retention in relation to demographic categorisation as causal and thus predictable, rather than seeing it as the unpredictable systematic 'effects of gender, class and ethnicity' (Edwards, 2010, p. 70).

The notion of *transition* is perhaps more helpful than *retention,* and can account for the complexities of the worlds we inhabit and to which we are subjected. This refers to a state of perpetual movement that occurs amidst 'irreducible difference' (Osberg, 2015, p. 25) rather than a discrete moment of change that enables the student to persist (Parkes et al., 2018). It is envisioned as a continuous process of boundary crossing where movement occurs across unfamiliar arenas (MacFarlane, 2018) that 'necessitates ongoing relations between multitudes of meanings'

(Bakhtin, cited in Akkerman & Bakker, 2011, p. 137). Transition, in this sense, can enable viewing students' experiences of university as a *perpetual* process of flux that Quinn would characterise as the 'unself (2004, p. 18); a 'creative chaos' (Braidotti, 2012, p. 172) of 'flows, energies, movements and capacities' (Grosz, 1994, pp. 197-198) that constructs possible futures (Braidotti, *ibid).* Student transition thus can be interpreted as tantamount to Bergson's (1911) notion of duration and latterly described as 'becoming' (Heidegger, cited in Gale & Parker, 2014; Trueit & Doll, 2010, p. 138); that which is created through the process of relating (Barad, 2007) and where 'multiple possibilities present themselves as equal possibilities' (Osberg, 2015, p. 36).

In conceptualising a student's transformation or transition through university, Deleuze's nomadic vision (Braidotti, 2012,) is useful as it reflects the rhizomatic nature of becoming which spreads in all directions, refusing 'fixed destination or static relations' (Postma, 2016, p. 14). Our realities are therefore 'the continual change of form' (Bergson, 1911, p. 301); the 'process of becoming as driven by forces and desires and fostered in a culture of affirmation that acts through either empowering or confining powers' (Braidotti, 2012, p. 173). At this juncture, 'dimensions of the multiplicities present within are either lost or gained' (Deleuze & Guattari, 1987, p. 249). Prigigone, in his *theory of irreversible processes* (Prigigone & Stengers, 1984, p. 310), would describe this moment as a 'bifurcation point' where the system chooses one of the possible branches of action with no preference for any one solution. Though potentially marked by systematic effects of gender, class, race and et cetera, the 'becoming is not *determined* by the system or its properties' (Biesta, 2010, p. 11). Furthermore, since all possibilities are equal, 'students emerge in and through educational processes thus becoming in unique and unpredictable ways' (Biesta, 2010, p. 6).

Knowledge of how students are empowered or confined thus should not focus on a discourse of *lack,* but potentially explore how power management and power relations affect becoming. Indeed, Foucault's (1990) discussion of how power comes from everywhere is useful in this respect, particularly in relation to student experiences of study. If power relations exist everywhere, then 'student experiences concern themselves with the circulation of power' (Braidotti, 2012, p. 171) across the spectrum of interactions and contexts within HE. This then, necessarily requires HE institutions to engage in perpetual inward reflection on the organic, social and material exchanges within, between and about notions of student difference (Thomas, 2017) in order to promote structural, cultural or individual transformation. Put simply, the power relations in a university shape everything about a student's experience. Therefore, when considering knowledge creation, HE institutions must recognise and appreciate how choices might be made and what power relations might be influencing student decisions (Biesta, 2010).

Academic study of LA is still in its infancy, but an extensive review by Viberg, Hatakka, Balter, and Mavroudi (2018) outlines the breadth of approaches, methods and evidence base in LA research, with findings suggesting that LA can improve learning support and teaching. However, what is not apparent from this review (and other reviews in the area, such as Ferguson, 2012; Ferguson & Clow, 2017) is the extent of student involvement in either the data collection or the designing and implementation of response processes/ interventions. The reviews seemingly communicate a broad body of literature that reflects LA as something done *to* students, not *with* them. For instance, West, Heath, and Huijser (2016) collected questionnaire and interview data from institutional and academic staff relating to the use of LA, but not from students. For LA to be fit-for-purpose for an institution, we argue, it should be designed and implemented in partnership with students, or as Dollinger and Lodge (2018) suggest, it should be co-created in order to appreciate goals and values, inclusivity, power (im)balances and contextual factors.

Recasting LA in order to be more human

If the student experience within higher education is one of *perpetual becomings,* LA work must be underpinned by a recasting of our values relating to the purpose of higher education. This means *re*sisting the assumption that any form of meaningful activity can be usefully - or only - measured through the use of numbers and algorithms (Deakin, Taylor, & Kupchik, 2018; Kitchin, 2014). Reasserting a vision of HE needs to recognise our complicity in the neo-liberal world yet focus on the processes of educational practice: how do we do this sort of work to ensure we do not reduce the complexity of existence and the value of HE?

Richard Shaull, in his introduction to one of the most influential educationalists of the twentieth century, Paulo Freire, asserts a core principle of Freire's work:

> There is no such thing as a *neutral* educational process. Education either functions as an instrument that is used to facilitate the integration of the younger generation into the logic of the present system and bring about conformity to it, *or* it becomes the 'practice of freedom,' the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world. (Freire, cited in Shaull, 1996, p. 16)

Freire makes clear that 'Neoliberal doctrine seeks to limit education to technological practice. Currently, education is no longer understood as formative, but simply as training. I feel we must keep on creating alternative work models' (Freire, 2007, p. 4). The challenge, then, is to create spaces and enact practices that provide alternative work models within the current neo-liberal dominant ideology. Just such an alternative work model was proposed forcibly in the UK by the National Union of Students in their *Manifesto for Partnership* (2012). This took aim both at the neo-liberal concept of student as *customer* and the traditional liberal concept of student as *apprentice,* and set out a vision of partnership as a commitment to student co-creation of knowledge, learning and the HE institution itself. Fundamentally, the *Manifesto* called for 'a meaningful dispersal of power' (NUS, 2012, p. 8) and provided 'a statement of the folly of trying to sell HE to students when we can unleash the power of working *with* students to transform HE' (Peters, 2018, p. 182). As Saunders (2015) has found, students resist the *student as consumer* model and desire a more fulfilling and meaningful engagement with learning.

Working with students as partners is not without its challenges. As Levy, Little, and Whelan (2011, p. 12) point out, the key question is 'to what extent can power relations between staff and students be challenged and changed in HE given its prevailing
ideological and structural characteristics?' Indeed this remains a central theme in the fastgrowing body of *students as partners* literature (Healey, 2019; Mercer-Mapstone et al., 2017). As a number of authors have observed, it is perfectly possible for students as partners to be 'appropriated for neo-liberal purposes' (Matthews, Dwyer, Hine, & Turner, 2018a, p. 15; Matthews, Dwyer, Russell, & Enright, 2018b) or domesticated to those ends (Peters, 2018), hence the need for constant vigilance as well as the importance recently placed on establishing principles of partnership practice which foreground values, equity, ethical practice and authentic co-creation (Bindra et al., 2018; Bovill, Cook-Sather, Felten, Millard, & Moore-Cherry, 2016; Dollinger, Lodge, & Coates, 2018; Dwyer, 2018; Matthews, 2017; Peseta et al., 2016;). Language is important too and so, by articulating Freirean principles of student partnership, we have sought to enact partnership work as a *conscious act of resistance* (Peters & Mathias, 2018).

Asserting the value of HE, our language needs to reflect a rejection of both the production ideologies of HE that comply with the neo-liberal concepts of student as consumer or product of HE, as well as reproduction ideologies, rooted in the liberal tradition of students as apprentice academics in search of knowledge for its own sake (Fanghanel, 2011). Instead, universities should be explicitly committed to *transformational* higher education: HE with moral purpose, seeking to provide access to all those who might benefit from it and intent on promoting 'their growth into valuable members of society, able to make a positive contribution wherever they find themselves' (Newman University, 2014, p. 13). Here the language is that of human flourishing through full participation in a diverse and inclusive learning community. As such, working in partnership with students should be central to the culture and pedagogic practice of an institution. Here, human growth is located at the centre of our activities and enacts student partnership as a means of promoting democratic engagement, meaningful dialogue and co-operative working through an explicit articulation and sharing of the principles of a 'pedagogy of partnership' (GuildHE, 2015, p. 23; Peters, 2014, 2016).

Responding compassionately

Within the hyper-competitive, biofinancialised HE context, it is no surprise that academics are beginning to seek out and undertake activities that facilitate compassion amongst and between fellow academics (see Haynes & Macleod-Johnstone, 2017; Mutch & Tatebe, 2017). However, surprisingly, there is limited explicit focus on academics being compassionate towards and actively *with* students. Clegg and Rowland (2010, p. 733) note that whilst systems and processes within HE are designed to be supportive, for the students, the 'individuals they encounter do make a difference, and that the personal qualities with which they imbue enactments and encounters matter'. It is argued here that, in these troubled times, there needs to be a shared sense of hope moving forwards (Peters, 2014). To develop this shared hope, HE institutions need to facilitate opportunities for, to echo Freire and

the UK's National Union of Students *Manifesto for Partnership* (2012), working *with* rather than *on* students. Developing a shared hope is not to be viewed as solely the responsibility of the university; however, in a linear process, the power dynamics of such work needs to be appreciated. Indeed, as Le Grange (2011) states, hope does not lie in what we can give or do for students, but in what we can learn with and from them as well as the opportunities we help make available in order for them to become present in an unjust system. Specifically, for Le Grange (2011, p. 184), hope 'is what emerges through serious and critical engagement in authentic partnerships with real-life challenges faced by contemporary society at local, regional and global scales'.

This more compassionate and human approach may appear positive yet abstract. By drawing on Noddings' (1984) relational view of education and an *ethic of care,* responding compassionately deepens ideas such as 'democracy, citizenship, moral education, interdisciplinary study, and critical thinking' within education (Thornton, 2018, p. 263). Furthermore, in the current climate, the systems and metrics in the UK and elsewhere (Drengenberg & Bain, 2017) might suggest that change is not possible or, in this form, even desirable. Therefore, a form of *transformative hope* is required, that is, 'a mode of hoping against the evidence' (Webb, 2013, p. 408). To see past the current HE landscape, it is important to utilise examples of exactly what this more hopeful, democratic engagement between students and staff could look like. As Freire (1972), amongst others, has highlighted, 'humans, as purposive creatures, are unlikely to respond to the calling to humanisation unless they can see in advance what the utopian "design" for humanisation looks like' (Webb, 2010, p. 330). Only through meaningful dialogue and co-operative working (Freire, 1972) can we work through the frustrated desires of students and staff in the neoliberal university (Zepke, 2018) and attempt to envision utopian possibilities, to expand 'the horizons of possibility and gives rise to a sense that the human future can be made different from the human past' (Webb, 2013, p. 409). Some examples of practice are offered here within the context of LA; at their core is the principle of developing interventions *with* students in order to develop practices that are not punitive but pedagogically focused, supportive, and compassionate.

A first step towards being (more) compassionate might be to, wherever possible, value the 'diverse knowledges and ways of knowing' (Gale & Parker, 2014, p. 741) within our respective learning communities. When utilising LA, it is critical to remember that 'the idea that life is experienced in a linear way (e.g., high school, university, the world of work; or childhood, youth, adulthood) is not sensitive to the ongoing changes, transformations, and the back-and-forward movements experienced by many people' (Gale & Parker, 2014, p. 744). Engagement data may 'flag a potential issue' but the response to that issue - the *intervention* - needs to draw on a more holistic and compassionate approach. At the most basic level, instead of a faceless, automated *nudge* via email or app notification warning a student that they are *at risk,* any response to the data should come from a known individual - a recognisable name and face - and, without making any assumptions, simply initiate contact. Automated, generic responses (or even the predictive algorithms available) fall into the broader neo-liberal HE trap outlined by Gale and Parker (2014, p. 745) in that they cannot 'capture the diversity of student lives, their experiences of university or of universities themselves', and therefore cannot realistically respond in a compassionate manner. Instead, it is argued here that interventions should start with (and be built around) human interactions. Genuine staff-student interaction is increasingly difficult to achieve in HE's massification environment where students are often reduced to mere numbers; indeed, knowing all of one's students is almost impossible. However, LA offers staff an opportunity to initiate contact with those *specific* students who may benefit from such human interaction. Another possibility is to use this initial contact to offer an additional level of support delivered not by the member of staff but by a fellow student. Here, staff and students work together to design a pedagogic intervention to then be delivered by students (with staff support) within their department - namely a peer mentoring system. Staff train and support student mentors who then facilitate a flagged student's re-engagement with their studies through a variety of *human* methods, including advice based on their own learning experiences, encouragement, reassurance, as well as practical measures such as strategies for time management and organisation. Potential staff burden thus becomes a student opportunity. What is vital to the success of such initiatives is genuine collaboration between students and staff; peer mentoring should not present itself as a shrugging off of responsibility but rather a strategic and effective method for actively facilitating student re-engagement.

Key to this democratic process is the involvement of the student from the outset, and not merely through a tokenistic consultation. This includes collecting and analysing data together to inform the development of initial ideas right through to the forming of institutional policy and the delivery of practice. Spending time and making space to think, discuss and debate in the initial stages is vital. Mutch and Tatebe (2017), who seek a more compassionate approach in their work, suggest retreats away from campus to help to break down perceived

institutional hierarchies. Such partnerships require time and funds but, by co-working and using a democratic process, the outcomes are far more likely to meet the needs of all parties. For this project, working in a transdisciplinary space of multiple departments, such co-working influenced the development of three separate-but-related peer mentoring projects in their relative departments; one student partner noted that

> being able to confer with other members of staff and students working on similar projects made me feel as though I was part of a team working towards something bigger. Whenever we all got together, we were all able to bounce off one another and offer each other feedback and advice.

This student's reflection on her involvement with the project was borne out of the human interaction across all levels of this project (further details of the project can be found in Benkwitz et al., *in review).* The human interaction involved in staff-student partnerships - and 'diverse knowledges and ways of knowing' (Gale & Parker, 2014, p. 741) that result - is then converted into the human interactions between students, also alert to diverse knowledges and ways of knowing, and which in turn result in a more compassionate practice of intervention. This example of human interaction provides a form of resistance to the automated, faceless implementation of analytics but it also encourages, values, and continually (re)shapes how students and staff work together in partnership to tackle the ever-evolving issues within HE.

Finally, and perhaps most radically, within this 'system-driven and system-serving' context (Gale & Parker, 2014, p. 747), the most difficult but most compassionate outcome to using LA is sometimes to support students in their withdrawal from the university. Recognising that it might be best for a student to end their studies, for whatever reason, and making that process as human as possible, might be the best and most responsible action on the part of the university. It is potentially grossly unethical for us to perpetuate a system that coerces students to stay in the system against their best interests in order to appease the metrics and for fear of punishment through reduced funding or lesser awards: in short, putting the institution before the student. At the very least, the more human, compassionate approach could be that through partnership, staff and students work together to make the best informed decision possible within a broken system, rather than use LA to impose our version of the system upon students who, potentially through no fault of their own, are struggling to navigate its messy terrain.

Concluding thoughts

In this article, we have argued for an 'alternative work model for HE' (Freire, 2007, p. 4) that can encompass both its inevitable position within, and complicity with, the current neo-liberal context for education but at the same time seeks to treat students not as consumers or mere numbers, as LA might encourage, but as individuals who bring their own 'diverse knowledges and ways of knowing' (Gale & Parker, 2014, p. 741) to *their* process of transitioning through HE. The use of new technologies such as LA must therefore be governed by the values underpinning HE, including democratic engagement, recognition of diverse and individual experience, processes of becoming, and staff-student partnership. It is through this partnership and collaboration with students - through human interaction - that we can 'hop[e] against the evidence' (Webb, 2013, p. 408). LA deal in numbers and percentages; the responses to those numbers deal in people.

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References

Akkerman, S., & Bakker, A. (2011). Boundary crossing and boundary objects. *Review of Educational Research, 81(2),* 132-169.

Alija, S. (2013). How attendance affects the general success of the student. *International Journal of Academic Research in Business and Social Sciences,* 3(1), 168-182.

Allen, D. (1999). Desire to finish college: An empirical link between motivation and persistence. *Research in Higher Education, 40,* 461-485.

Ayala, J. C., & Manzano, G. (2018). Academic performance of first-year university students: The influence of resilience and engagement. *Higher Education Research & Development,* 37(7), 1321-1335.

Ball, S. (2017). *The education debate* (3rd ed.). Bristol: The Policy Press.

Barad, K. (2007). *Meeting the universe halfway. Quantum Physics and the entanglement of matter and meaning.* Durham, NC: Duke University Press.

Barnett, R. (2000). Supercomplexity and the curriculum. *Studies in Higher Education,* 25(3), 255265.

Bergson, H. (1911). *Creative evolution.* New York, NY: Henry Holt.

Biesta, G. (2010). Five theses on complexity reduction and its politics. In D. Osberg & G. Biesta (Eds.), *Complexity theory and the politics of education* (pp. 5-14). Rotterdam: Sense.

Bindra, G., Easwaran, K., Firasta, L., Hirsch, M., Kapoor, A., Sosnowski, A., ... Vatansever, G. (2018). Increasing representation and equity in students as partners initiatives. *International Journal for Students As Partners*, *2*(2), 10-15. doi:10.15173/ijsap.v2i2.3536

Bovill, C., Cook-Sather, A., Felten, P., Millard, L., & Moore-Cherry, N. (2016). Addressing potential challenges in co-creating learning and teaching: Overcoming resistance, navigating institutional norms and ensuring inclusivity in student-staff partnerships. *Higher Education, 71(2),* 195-208. doi:10.1007/s10734-015-9896-4

Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). *Review of Australian Higher Education, Australia, commonwealth of Australia.* Retrieved from https://apo.org.au/node/15776

Braidotti, R. (2012). Nomadic ethics. In D. Smith & H. Somers-Hall (Eds.), *The Cambridge companion to Deleuze* (pp. 170-197). Cambridge: Cambridge University Press.

Clegg, S., & Rowland, S. (2010). Kindness in pedagogical practice and academic life. *British Journal of Sociology of Education,* 31(6), 719-735. doi:10.1080/01425692.2010.515102

Connell, R. (2019). *The good university: What universities actually do and why its time for radical change.* London: Zedbooks.

Coole, D., & Frost, S. (2010). Introducing the new materialisms. In D. Coole & S. Frost (Eds.), *New materialisms: Ontology, agency and politics* (pp. 1-45). Durham and London: Duke University Press.

Cvetkovski, S., Jorm, A. F., & Mackinnon, A. J. (2018). Student psychological distress and degree dropout or completion: A discrete-time, competing risks survival analysis. *Higher Education Research & Development*, *37*(3), 484-498.

Deakin, J., Taylor, E., & Kupchik, A. (Eds.). (2018). *The Palgrave international handbook of school discipline, surveillance and social control*. London: Palgrave Macmillan.

de Gayardon, A., & Bernasconi, A. (2016). Chilean universities: Not so tuition-free after all. *International Higher Education, 86.* Retrieved from https://ejournals.bc.edu/index.php/ihe/ article/view/9372/8381

Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia.* (B. Massumi, Trans.). Minneapolis: University of Minnesota Press.

Dollinger, M., Lodge, J., & Coates, H. (2018). Co-creation in higher education: Towards a conceptual model. *Journal of Marketing for Higher Education,* 28(2), 210-231.

Dollinger, M., & Lodge, J. M. (2018). Co-creation strategies for learning analytics. *Proceedings of the International Conference on Learning Analytics and Knowledge, Sydney, Australia, March 2018 (LAK'18), 5 pages.* doi:10.1145/3170358.3170372.

Drengenberg, N., & Bain, A. (2017). If all you have is a hammer, everything begins to look like a nail - How wicked is the problem of measuring productivity in higher education? *Higher Education Research & Development*, *36*(4), 660-673.

Drew, L. (2018, June 26). Value for money? What a grim, cold way to talk about universities. *The Guardian*. Retrieved from https://www.theguardian.com/higher-education-network/2018/jun/ 26/value-for-money-what-a-grim-cold-way-to-talk-about-universitiesvalue-for-money- universities-government-further-education-job

Dwyer, A. (2018). Toward the formation of genuine partnership spaces. *International Journal for Students as Partners,* 2(1), 11-15. doi:10.15173/ijsap.v2i1.3503

Edwards, R. (2010). Complex global problems, simple lifelong learning solutions. Discuss. In D. Osberg & G. Biesta (Eds.), *Complexity theory and the politics of education* (pp. 69-78). Rotterdam: Sense Publishers.

Fanghanel, J. (2011). *Being an academic.* London: Routledge.

Ferguson, R. (2012). Learning analytics: Drivers, developments and challenges. *International Journal of Technology Enhanced Learning, 4(5),* 304-317.

Ferguson, & Clow, D. (2017). Where is the evidence? A call to action for learning analytics. In: *LAK '17 Proceedings of the seventh international learning analytics and knowledge conference, ACM international conference proceeding series* (pp. 56-65). New York: ACM.

Foucault, M. (1990). *The history of sexuality, vol. 3. The care of the self*. London: Penguin.

Freire, P. (1972). *Cultural action for freedom.* Harmondsworth: Penguin.

Freire, P. (2007). *Daring to dream: Toward a pedagogy of the unfinished.* London: Paradigm.

Gale, T., & Parker, S. (2014). Navigating change: A typology of student transition in higher edu cation. *Studies in Higher Education,* 39(5), 734-753.

Grosz, E. (1994). *Volatile bodies: Towards a corporeal feminism.* Bloomington, IN: India University Press

GuildHE. (2015). *Making student engagement a reality: Turning theory into practice.* London: GuildHE.

Haynes, J., & Macleod-Johnstone, E. (2017). Stepping through the daylight gate: Compassionate spaces for learning in higher education. *Pastoral Care in Education,* 35(3), 179-191.

Healey, M. (2019). *Students as partners and change agents: A selected bibliography.* Retrieved from www.mickhealey.co.uk/resources

Hursh, D., & Hall, D. (2008). Re-politicizing higher education and research within neoliberal globalization. *Policy Futures in Education,* 9(5), 1-31. Retrieved from http://journals.sagepub.com/ doi/pdf/10.2304/pfie.2011.9.5.560

Kakuchi, S. (2018, January 19). Free higher education offered to low-income families. *University World News*. Retrieved from https://www.universityworldnews.com/post.php?story=20180118083451687

Kamens, D. (2016). Globalization and the emergence of an audit culture: PISA and the search for 'best practices' and magic bullets. In H. Meyer & A. A. Benavot (Eds.), *PISA, power and policy: The emergence of global educational governance* (pp. 117-139). Oxford: Symposium Books.

Kitchin, R. (2014). *The data revolution: Big data, open data, data infrastructures & their consequences*. London: Sage.

Law, J. (2004). *After method: Mess in social science research*. London: Routledge.

Lea, J. (2016). The nature of academic knowledge. In J. Lea (Ed.), *Enhancing learning and teaching in higher education: Engaging with dimensions of practice* (pp. 113-140). Maidenhead: Open University Press.

Le Grange, L. (2011). A pedagogy of hope after Paulo Freire. *South African Journal of Higher Education,* 25(1), 183-189.

Levy, P., Little, S., & Whelan, N. (2011). Perspectives on staff-student partnership in learning, research and educational enhancement. In S. Little (Ed.), *Staff-student partnerships in higher education* (pp. 1-15). London: Continuum.

Lilley, S., & Papadopoulos, D. (2014). Material returns: Cultures of valuation, biofinancialisation and the autonomy of politics. *Sociology,* 48(5), 972-988. doi:10.1177/0038038514539206

MacFarlane, B. (2016). *Freedom to learn: The threat to student academic freedom and why it needs to be reclaimed*. Society for Research into Higher Education. Oxon: Routledge.

MacFarlane, K. (2018). Higher education learner identity for successful student transitions. *Higher Education Research & Development,* 37(6), 1201-1215.

Marcucci, P., & Johnstone, B. (2007). Tuition fee policies in a comparative perspective: Theoretical and political rationales. *Journal of Higher Education Policy and Management,* 29(1), 25-40. doi:10.1080/13600800600980015

Matthews, K. E. (2017). Five propositions for genuine students as partners practice. *International Journal for Students as Partners, 1(2),* 1-9.

Matthews, K. E., Dwyer, A., Hine, L., & Turner, J. (2018a). Conceptions of students as partners. *Higher Education,* 76(6), 957-971. doi:10.1007/s10734-018-0257-y

Matthews, K. E., Dwyer, A., Russell, S., & Enright, E. (2018b). It is a complicated thing: Leaders' conceptions of students as partners in the neoliberal university. *Studies in Higher Education*. doi:10.1080/03075079.2018.1482268

Meeto, V. (2017). Black and minority ethnic researchers doing 'race' research in schools: A double- edged sword? *Research Intelligence.* BERA, 132.

Mercer-Mapstone, L., Dvorakova, S. L., Matthews, K. E., Abbot, S., Cheng, B., Felten, P., ... Swaim, K. (2017). A systematic literature review of students as partners in higher education. *International Journal for Students as Partners,* 1(1), 1-23. doi:10.15173/ijsap.v1i1.3119

Mutch, C., & Tatebe, J. (2017). From collusion to collective compassion: Putting heart back into the neoliberal university. *Pastoral Care in Education,* 35(3), 221-234.

Myers, E. (1960). *Education in the perspective of history.* New York: Harper.

National Audit Office (NAO). (2007). *Staying the course: The retention of students in higher education.* Retrieved from http://www.nao.org.uk/publications/0607/student_retention_in_higher_ ed.aspx

National Union of Students (UK). (2012). *Manifesto for partnership.* Retrieved from https:// nusdigital.s3-eu-west-1.amazonaws.com/document/documents/16659/bf343f09e6fdd4c5a4f7392d0433f2d7/A%20Manifesto%20for%20Partnership.pdf?AWSAccessKeyId=AKIAJKEA56ZWKFU6MHNQ&Expires= 1542328146&Signature=L9dWkL7VSq8sq%2Bg2PGImdW32V3U%3D

Naylor, R., Baik, C., & Arkoudis, S. (2018). Identifying attrition risk based on the first year experience. *Higher Education Research & Development,* 37(2), 328-342.

Newman University. (2014). *Newman University strategic plan 2014 - 2020.* Retrieved from http://www1.'newman.ac.uk/files/w3/about-us/pdf/Strategic%20Plan%202014-2020%20.pdf?q=247

Noddings, N. (1984). *Caring: A feminine approach to ethics and moral education.* London: University of California Press.

Olmos, M., & Corrin, L. (2012). Learning analytics: A case study of the process of design of visualizations. *Journal of Asynchronous Learning Networks,* 16(3), 39-49.

Olssen, M., & Peters, M. (2005). Neoliberalism, higher education and the knowledge economy: From the free market to knowledge capitalism. *Journal of Education Policy,* 20(3), 313-345.

Organisation for Economic Co-operation and Development. (1996). *The knowledge-based economy.* Retrieved from https://www.oecd.org/sti/sci-tech/1913021.pdf

Osberg, D. (2015). Learning, complexity and emergent (irreversible) change. In D. Scott & H. Hargreaves (Eds.), *The sage handbook of learning* (pp. 23-40). London: Sage.

Osberg, D., & Biesta, G. (2007). Beyond presence: Epistemological and pedagogical implications of 'strong' emergence. *Interchange,* 38(1), 31-51.

Parkes, S., Mathias, L., & Seal, M. (2018). Becoming a Newman foundation year student: Conscientization to promote democratic engagement, meaningful dialogue and co-operative working. *Journal of the Foundation Year Network, 1,* 71-86.

Peseta, T., Bell, A., Clifford, A., English, A., Janarthana, J., Jones, C., ... Zhang, J. (2016). Students as ambassadors and

researchers of assessment renewal: Puzzling over the practices of university and academic life. *International Journal for Academic Development,* 21(1), 54-66.

Peters, J. (2014). *The pedagogy of partnership.* Retrieved from https://www.newman.ac.uk/about-us/ academic-practice/the-pedagogy-of-partnership/

Peters, J. (2016). The pedagogy of partnership: Six principles for action. *Educational Developments, 17(4),* 8-9. Retrieved from https://www.seda.ac.uk/past-issues/17

Peters, J. (2018). The pedagogies of partnership: From Blair to Freire? In A. Melling & R. Pilkington (Eds.), *Paulo Freire and transformative education* (pp. 175-189). London: Palgrave Macmillan.

Peters, J., & Mathias, L. (2018). Enacting student partnership as though we really mean it: Some Freirean principles for a pedagogy of partnership. *International Journal for Students As Partners, 2(2),* 53-70. doi:10.15173/ijsap.v2i2.3509

Postma, D. (2016). The ethics of becoming in a pedagogy for social justice: A posthumanist perspective. *South African Journal of Higher Education,* 30(3), 310-328.

Prigigone, I., & Stengers, I. (1984). *Order out of chaos: Man's new dialogue with nature.* London: Bantam Books.

Quinn, J. (2004). Understanding working-class 'drop-out' from higher education through a sociocultural lens: Cultural narratives and local contexts. *International Studies in Sociology of Education, 14(1),* 57-74. doi:10.1080/09620210400200119

Rudd, T., & Goodson, I. (2017). Negotiating neoliberal education. In T. Rudd & I. Goodson (Eds.), *Negotiating neoliberalism: Developing alternative educational visions* (pp. 1-12). Rotterdam: Sense.

Saunders, D. B. (2015). They do not buy it: Exploring the extent to which entering first-year students view themselves as customers. *Journal of Marketing for Higher Education,* 25(1), 5-28. doi:10.1080/08841241.2014.969798

Shaull, R. (1996). *Foreword in freire, p. pedagogy of the oppressed.* London: Penguin

Shore, C. (2010). Beyond the multiversity: Neoliberalism and the rise of the schizophrenic university. *Social Anthropology,* 18(1), 15-29.

Slade, S., & Prinsloo, P. (2013). Learning analytics. *American Behavioral Scientist,* 57(10), 15101528.

Society for Learning Analytics Research. (2019). *What is learning analytics?.* Retrieved from https:// www.solaresearch.org/about/what-is-learning-analytics/

Thomas, L. (2011). Do pre-entry interventions such as 'Aimhigher' impact on student retention and success? A review of the literature. *Higher Education Quarterly,* 65(3), 230-250. doi:10.1111/j. 1468-2273.2010.00481.x

Thomas, L. (2012). *Building student engagement and belonging in higher education at a time of change: A summary of findings and recommendations from the what works? Student retention & success programme.* Paul Hamlyn Foundation, Higher Education Funding Council for England, The Higher Education Academy and Action on Access. Retrieved from https://s3.eu- west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/hea/private/ what_works_final_report_1568036657.pdf.

Thomas, L. (2017). *What works? Student retention & success programme.* Paul Hamlyn Foundation. Thornton, S. J. (2018).
Nel Noddings as social (studies) educator. *Theory Into Practice,* 57(4), 263
269. doi:10.1080/00405841.2018.1518642

Tindell, G. (2016). Learning analytics @ UEL: An update on developments. *5th UK Learning Analytics Network event*, University of East London.

Tremblay, K., Lalancette, D., & Roseveare, D. (2012). *Assessment of higher education learning outcomes (AHELO) feasibility study volume one*. Organisation for Economic Co-operation and Development. Retrieved from http://www.oecd.org/education/skills-beyond-school/ AHELOFSReportVolume1.pdf

Trueit, D., & Doll Jr., E. (2010). Thinking complexly: Being-in-relation. In D. Osberg & G. Biesta (Eds.), *Complexity theory and the politics of education* (pp. 135-152). Rotterdam: Sense.

Viberg, O., Hatakka, M., Balter, O., & Mavroudi, A. (2018). The current landscape of learning analytics in higher education. *Computers in Human Behavior,* 89(1), 98-110.

Vizoso, C., Rodriguez, C., & Arias-Gundin, O. (2018). Coping, academic engagement and performance in university students. *Higher Education Research & Development,* 37(7), 1515-1529.

Webb, D. (2010). Paulo Freire and 'the need for a kind of education in hope'. *Cambridge Journal of Education, 40(4),* 327-339.

Webb, D. (2013). Pedagogies of hope. *Studies in Philosophy and Education,* 32(1), 397-414. Welch, A. (2016). Audit
culture and academic production. *Higher Education Policy,* 29(4), 511-538. West, D., Heath, D., & Huijser, H. (2016). Let's talk learning analytics: A framework for implemen
tation in relation to student retention. *Journal of Asynchronous Learning Network, 20(2),* 1-22.

Yin-Kim Yau, J. (2018). Utilizing learning analytics for study success. *European First Year Experience Annual Conference,* 25-27 June 2018. University of Applied Sciences and Utrecht University, Utrecht: The Netherlands.

Zepke, N. (2018). Student engagement in neo-liberal times: What is missing? *Higher Education Research & Development,* 37(2), 433-446.