# *What's wrong with 'technology enhanced learning'?*

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## Abstract

In recent years, 'technology enhanced learning', or 'TEL', has become a widely-accepted term in the UK for describing digital incursions upon higher education, to a large extent taking the place of other recently-popular terminologies such as 'e-learning', 'learning technology' and 'computer-based learning'. Yet there has been little critique in the literature of the fundamental assumptions embedded within the terminology of TEL: rather it has been adopted as an apparently useful, inoffensive and descriptive shorthand for what is in fact a complex and often problematic constellation of social, technological and educational change.

In their paper reviewing interpretations of 'TEL' in the existing literature, Kirkwood and Price (2013) emphasise the tendency to use the term in an 'unconsidered and unreflecting' way (4), making a sound attempt to provide some clarity by synthesising the various tacit conceptions of enhancement in existing research in educational technology. In this brief paper, I will approach the issue rather differently, by subjecting the term itself to a critique, drawing on insights from science and technology studies, critical posthumanism and Biesta's (2005) critique of the 'learnification' of education. In doing so, my aim is to begin to question the widespread buy-in to the term by researchers, practitioners and policy-makers. I aim to argue that 'TEL', far from being an unexceptionable and neutral term simply in need of clearer definition, is in fact a deeply conservative discourse which reduces our capacity to be critical about digital education, and fails to do justice equally to the disruptive, disturbing and generative dimensions of the academy's enmeshment with (digital) technology. As an alternative, I conclude with an overview of the ways in which critical posthumanism might inform a richer understanding of the issues at stake, suggesting that we need to be more careful with, and more critical of, the terminology we adopt to describe and determine the field of digital education.

## Keywords

technology enhanced learning, TEL, posthumanism, transhumanism, learnification

## Mapping 'TEL'

Naming the complex, febrile relation of education to digital technology has been an often contentious project over the last couple of decades of UK higher education. From 'ICT for learning' to 'educational technology', from 'computer based learning' to 'online education' each differently-inflected term has had its moments and its adherents. The terminology gaining most currency at the present moment, however, is 'technology enhanced learning', or 'TEL'.

The last two or three years have seen TEL units, teams and centres established at the universities of Lancaster, Kings College London, Derby, Liverpool, Bristol, Plymouth, Surrey and the University of the West of England to name just a few. Postgraduate programmes explicitly naming themselves for TEL are now being offered by Sheffield Hallam, Huddersfield, Lancaster and Durham. At the same time, research agendas clustering around TEL reach beyond individual university research groupings to national and supra-national programmes, notable examples being the UK research council Teaching and Learning Programme 'Technology Enhanced Learning' (2007-2012; funding of £12 million) and the European Seventh Framework Programme TeLearn programme (2006-12; funding of €211 million).

The term is adopted by the Higher Education Funding Council for England (HEFCE 2009) and the UK Higher Education Academy (HEA 2009). It has been used to name a new journal (The International Journal of Technology Enhanced Learning, first published in 2008), a European conference series and research network, and has been adopted by the Universities and Colleges Information Systems Association (UCISA) as the most



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useful term for their regular survey of technology use within UK higher education teaching. While it is ‘rare to find explicit statements about what TEL actually means’ (Kirkwood and Price 2013, 1), the authors of the 2008 UCISA report do reflect on their shifting choices of terminology, mapping the shift from the 2001 report’s emphasis on ‘VLEs’ (virtual learning environments), through the 2005 usage of ‘e-learning’ to the dominance, by 2008, of ‘TEL’:

> By 2008, there had been yet another semantic shift towards phraseology that attempted to capture more explicitly the enhancing role of technology upon learning, with the term Technology Enhanced Learning (TEL) gaining increasing currency. TEL is, therefore, the lingua franca used in the 2008 Survey. (UCISA 2008, 3)

The changing terminology over the period 2005-2009 is also referenced by HEFCE (2009) when the authors of their updated strategy for ‘e-learning’ (now called ‘Enhancing learning and teaching through the use of technology’) rationalise the change by emphasising the term ‘e-learning’ as being 'too narrowly defined'. (1) Previous terminologies are thus abandoned by HEFCE and UCISA in favour of a notion of ‘TEL’ which is claimed by one to be ‘more explicit’ about the enhancement value of technology (UCISA 2008) and by the other to be ‘less narrowly defined’ than the previously dominant term ‘e-learning’ (HEFCE 2009). Yet no genuinely convincing rationale is given in either report for why this shift to TEL is a desirable one.

## Critical perspectives on 'TEL'

In their paper reviewing interpretations of ‘TEL’ in the existing literature, Kirkwood and Price (2013) emphasise the tendency to use the term in an ‘unconsidered and unreflecting’ way (4), making a sound attempt to provide some clarity by synthesising the various tacit conceptions of enhancement in existing research in educational technology. In this brief paper, I will approach the issue rather differently, by subjecting the term itself to a critique, drawing on insights from science and technology studies, critical posthumanism and Biesta’s (2005) critique of the ‘learnification’ of education. In doing so, my aim is to begin to question the widespread buy-in to the term by researchers, practitioners and policy-makers. I aim to argue that ‘TEL’, far from being an unexceptionable and neutral term simply in need of clearer definition, is in fact a deeply conservative discourse which reduces our capacity to be critical about digital education, and fails to do justice equally to the disruptive, disturbing and generative dimensions of the academy’s enmeshment with (digital) technology.

In the first section of the presentation, I will ask the question, 'What is wrong with "technology"?'. I will emphasise the ways in which technology in ‘TEL’ tends to be black-boxed, under-defined and generally described in instrumental or essentialist terms (Hamilton and Friesen, 2013) which either subordinate social practice to technology, or subordinate technology to social practice. These discursive moves prevent a broader critical engagement with the impact of digital education, failing to take account of its complex sociomaterialities and the fact that ‘learning’ is iteratively performed, enacted and constructed as desirable via the networks and complex interactions of the social/educational and material/technological (Fenwick et al, 2011). Rather it reduces the relation between the human and the non-human or 'machinic' to one of simple domination. In doing so, TEL shies away from addressing questions to do with the nature and constitution of the human subject, falling back instead on a comfortable anthropocentrism which assumes an overly-neat boundary between what is human, and what is not.

I will then move on to consider 'what is wrong with "enhancement"?', looking at how this ‘ontological separation of human and machine’ (Thacker, 2003) is also played out in the tacit alignment of TEL with other ‘enhancement’ discourses, most notably those of transhumanism and the notion of cognitive enhancement. Here, the critique of transhumanism by critical posthumanism is useful to us in revealing how much of the discourse of TEL is located within an unquestioning dependence on humanistic values which have been drawn into serious question elsewhere in the academy: rationality, autonomy, dominance over ‘nature’ and the possibility of human perfectibility via technological enhancement and the power of scientific progress.

Hayles (2011) critiques transhumanism’s focus on ‘individual transcendence’ and highlights the ‘conspicuous absence of [consideration] of socioeconomic dynamics beyond the individual’ within transhumanist literatures. We see the same pattern in our treatment of ‘TEL’ as a reified and hermetically-sealed area of institutional practice and development which makes very few critical connections to broader societal debates about, for example, the ethics of biotechnological intervention in ‘the human’, use of performance-enhancing drugs within


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and beyond the academy, or the global social and economic contexts of technological change. Further, Hayles emphasises that the ‘decontextualising moves’ we see in transhumanism (and, as I argue, in TEL) ‘over-simplify … and carry into the new millennium some of the most questionable aspects of capitalist ideology’ (np) in its emphasis on individual transcendence through the application of scientific rationality.

This link between capitalist ideology, individual transcendence and the neglect of context will be carried through into the third section of the presentation which will draw on Biesta’s (2005, 2006, 2012) critique of the ‘learnification’ of education in asking 'what is wrong with "learning"?'. A cross-sectoral over-emphasis on ‘learning’ - of which TEL is only one example of many - for Biesta moves our focus away from the broader social and economic contexts of ‘education’ and ‘teaching’, masking the need for a broader critique by emphasising the primary function of education as being the achievement of individual cognitive gains. Education here becomes simply a question of transaction: a ‘meeting’ of the ‘needs’ of ‘learners’, and subject to the 'forces of the market', rather than a critical engagement with the question of the goals, function and processes of education in society. In this view, education itself is constructed as instrumental in much the same way that technology is constructed as instrumental in TEL. As Biesta (2005) points out, ‘Education is, can be, and should be about something else and something more than what the learning managers, the learning facilitators, and the technicians of the new language of learning may want us to believe’ (12).

## Conclusion

I would not wish to argue that every theoretical perspective referenced here can be aligned with the critical posthumanist position. However, I would suggest that each engages in a dialogue with humanism in various forms, and that each points us toward a need to draw on the openings offered by critical posthumanism in re-thinking 'TEL'. Critical posthumanist thought asks us to move beyond anthropocentrism and the focus on the individual, toward a greater concern with the networks, ecologies and sociomaterial contexts of our engagement with education and technology. It questions the ontological isolation of individual and technology, rather emphasising an affirmative - if often anti-humanist - 'flow of relations with multiple others' (Braidotti 2013, 50). Critical posthumanist thought is itself multiple, but it is fair to characterise it, with Braidotti, as involving a focus on a different kind of human subject, one which is entangled with its material and ecological contexts, rather than dominant over them. Such a subject 'proposes an enlarged sense of inter-connection between self and others, including the non-human or 'earth' others, by removing the obstacle of self-centred individualism' (49). It also involves us in a re-thinking of the function of education as an 'anthropological machine' (Agamben 2004; Lewis and Khan 2010) which functions primarily to re-produce 'the human' as an entity which exists in isolation from the animal and the non-human.

Thus critical posthumanism offers us a chance to move away from the instrumental understandings of the role of technology in education evident in the terminology of TEL, toward a more nuanced view of its relation to the broader contexts of human subjectivity and its formation, and the place and potentials of education in this project . To draw on these would give us a framework for understanding TEL as a field of genuine social importance: one which is in many ways dealing with some of the thorniest and most pressing issues in contemporary society, to do with where the boundaries of ‘the human’ lie, who and what influences technological change, and how we conceive of the purpose and function of education. As Braidotti (2013) reminds us:

> Instead of falling back on the sedimented habits of thought that the humanist past has institutionalised, the posthuman predicament encourages us to undertake a leap forward into the complexities and paradoxes of our times. (54)

The very term ‘technology enhanced learning’, I have argued, works to entrench a very particular – and reductive – understanding of the relation between technology, education, individual and world. As researchers and practitioners of digital education, we need to move away from our over-emphasis on how technology acts on education, or how education can best act on technology. Let us rather acknowledge that the two are co-constitutive of each other, entangled in cultural, material, political and economic assemblages of great complexity. We should embrace our task as practitioners and researchers in digital education not simplistically as the brokers of ‘transformation’, or ‘harnessers’ of technological power, but rather as critical protagonists in wider debates on the new forms of education, subjectivity, society and culture worked-through by contemporary technological change.


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