

What's the matter with 'technology-enhanced learning'? Sian Bayne

what is wrong with "technology"?

- Hamilton and Friesen (2013) construct a strong critique of online education research [...], describing it as being overly dependent on two simplistic, 'commonsense' understandings of the nature of technology: the essentialist and the instrumentalist. Where **essentialism** attributes to technology a set of 'inalienable qualities' immanent to the technological artefact, **instrumentalism** constructs technology as a set of neutral entities by which pre-existing goals (for example, 'better' learning) can be achieved.
- technology can be utilised to enhance pre-existing personal and societal educational objectives (instrumentalism); equally 'learning' can be transformed by the immanent pedagogical value of certain technologies simply allowing itself to be open to them (essentialism)
- a reduction of the complex entanglements of the social and the technological to a clear relation of subordination
- Rather than asking how technology can 'enhance' learning, how it can service or 'transform' learning, perhaps we need to ask, "what our values are as educators and how we might envisage these values as operative aspects of online education as a sociotechnical practice. We need to ask not only what technologies can do, but where they fail in relation to our expectations of education." Hamilton and Friesen
- Assumes a pre-existing set of practices which are not in need of radical shift or displacement but rather simply open to be made even 'better' by the judicious application of a little technological assistance
- "...it makes no sense to see 'learning' as open to mere 'enhancement' by the operations of an externally applied technology 'solution'. Rather it asks us to understand learning, teaching and all associated academic practices as dependent on and enacted through the material contexts – including digital technologies– with which they are enmeshed.

What we mean by 'technology' in the context of 'TEL' is rarely made explicit in the documents which make use of the term: there appears to be a sense in which it is seen as needing no further qualification. Where definitions are given, the overwhelming emphasis is on the role of technology as a 'supportive' mechanism for the already-existing educational activities of teaching and learning

Glossary

- Anthropocentrism - the belief that considers human beings to be the most significant entity of the universe and interprets or regards the world in terms of human values and experiences
Post-anthropocentric thought encompass not only other species, but also the sustainability of our planet as a whole. Because contemporary market economies profit from the control and commodification of all that lives, they result in hybridization, erasing categorical distinctions between the human and other species, seeds, plants, animals and bacteria.
- Immanent - existing or operating within; inherent.
- Where critical posthumanism is concerned with the interrogation and critique of humanism, transhumanism is deeply committed to its core values, seeing itself as in essence an extension of the humanist project. The primary concerns of the transhumanist worldview are with the perpetuation of the humanistic values of rationality, autonomy, dominance over 'nature' and human perfectibility via technological enhancement and the power of scientific progress. See Sian's critique of this view to the left of this map.

what is wrong with "enhanced"?

- Scientific intervention is proposed as having the capacity to remove human limitations via 'life extension therapies; reproductive choice technologies; cryonic procedures; and many other possible human modification and enhancement technologies.' Yet after science and technology have worked over all human limitations – including mortality – the transhumanists claim that something essentially human 'will still remain': reason, intelligence, self realization, egalitarianism. Technology here simultaneously, and paradoxically, enables both the transcendence and the preservation of the human.
- A critical posthumanist position on technology and education would see the human neither as dominating technology nor as being dominated by it. Rather it would see the subject of education itself as being performed through a coming together of the human and non-human, the material and the discursive. It would not see 'enhancement' as a feasible proposition, in that enhancement depends on maintaining a distinction between the subject/learner being enhanced and the object/technology 'doing' or 'enabling' the enhancement.

'technology-enhanced learning', or 'TEL', has become a widely accepted term in the UK and Europe for describing the interface between digital technology and higher education teaching

- This paper subjects the term to a deeper analysis, drawing on insights from critical posthumanism, science and technology studies and Biesta's critique of the 'learnification' of education.
- interestingly a more recent Google trends comparison of the terms "technology enhanced learning" versus "e-learning" versus "online learning" shows that the term technology enhanced learning is searched for less often

Professor Biesta's article is a response to the marginalisation of teaching in modern society, and a call for teachers to teach, to be allowed to teach, and to have the courage to teach. The premise of the professor's argument is that there is a difference between 'education' and 'learning'.
<https://jan2ipart0.wordpress.com/2014/09/30/the-learnification-of-education/>

what is wrong with "learning"?

- When we speak of technology enhanced learning we are in fact referring to technology enhanced teaching, and to institutional goals, rather than to the aims or cognitive gains of individual learners
- One of the most remarkable changes that has taken place over the past two decades in the way in which we speak about and in education, is the rise of the concept of 'learning' and the subsequent decline of the concept of 'education'. Teaching has, for example, become redefined as supporting or facilitating learning, just as education is now often described as the provision of learning opportunities or learning experiences. Adult education has become adult learning. And governments of many countries nowadays stress the need for lifelong learning and the development of a learning society. (Biesta 2005, 55)
- It is time to re-think our task as practitioners and researchers in digital education, not viewing ourselves 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.

