The politics of networked learning in an age of austerity.

Chris Jones

School of Education, Leisure and Sport, Liverpool John Moores University, c.r.jones1@ljmu.ac.uk

Abstract

Networked learning has always had a connection to a set of pedagogic values and it has defined itself as linked to the development of information and communication technologies. These values and the technologies which allow for the development of contemporary networked learning mean that the field has an implicit politics. In an age of austerity what are the implications for networked learning? The development of networked learning largely coincided with the development of neo-liberal politics in advanced industrial countries and the technologies deployed to enable networked learning are largely the outcome of design and development carried out by large multi-national US based corporations. This backdrop of neo-liberal corporatism was called into question by the banking crisis of 2008 and the conversion of a private debt crisis into a sovereign debt crisis. In this process public austerity has become a dominant consideration in policy for higher education. Government has changed its relationship to higher education, most notably in the UK (focused on England), and is generally trying to both reduce overall expenditure and at the same time ensure either equivalent outputs or improved levels of output. The drive for productivity gains, a drive for 'more for less', informs the hype and policy motivation behind xMOOCs because they seem to offer a way to enable cheaper and wider access to higher education. This paper takes a critical look at the way austerity politics are revising the values and affecting the development of technologies for networked learning and suggests ways that researchers will need to engage with resistance to aspects of austerity politics.

Keywords

Networked learning, politics, policy, MOOC

The politics of networked learning

There are a small number of papers and articles that address the question of the politics of networked learning directly but the place of values and ethics in networked learning is more widely acknowledged (Jones 2001, Jones 2002, Land 2006, Greener and Perriton 2005). The wider field of educational technology has recently seen an increasing interest in a critical approach based on the social sciences which has a political focus (see for example Selwyn and Facer 2013). Early work focused on issues raised by technologically determinist accounts and the way that they influenced policy (Jones 2002a). Technological determinism remains an important issue (Oliver 2011) and one that has a continuing effect on policy, for example by way of the rhetoric and policy choices informed by the idea of the net generation and digital natives (Jones 2011). In their brief history of networked learning McConnell, Hodgson and Dirckinck-Holmfeld do not mention politics directly and only refer to policy at an institutional level. Nevertheless their history clearly identifies the role of critical pedagogy and an ethical stance in relation to collaborative learning:

The various scholars and practices associated with networked learning have an identifiable educational philosophy that has emerged out of those educational theories and approaches that can be linked to radical emancipatory and humanistic educational ideas and approaches. (McConnell et al 2012 p15)

Collaboration, cooperation and community are terms referenced frequently in networked learning that have a clear relationship to political and ethical positions and they have received regular critical attention (for example see Fox 2005). Overall, however, networked learning has rarely engaged with the broader political landscape sketched by Selwyn and Facer (2013) and it is arguably a pressing concern in the current period because of the severe pressures placed on higher education by economic conditions.

Following the banking crisis of 2008/9 governments increased their debt levels to stabilise the financial system and to secure the debts of banks. The crisis that followed has severely affected almost all of the advanced industrial countries (with minor exceptions e.g. Australia), the effect on the BRIC countries and other developing economies has been less sharp and taken longer to develop. These economic and financial conditions

matter because they set the tone of public debate, for example about immigration and foreign student numbers, and because they affect public finances and thus directly affect the funding of higher education. This has been shown most starkly in the introduction of £9,000 (per annum) fee levels for most university courses in England. This policy change, not signalled in the political parties pre-election manifestos, was driven through under the cloak of austerity and has led to a number of perverse and unanticipated consequences. Indeed the changes may actually cost more than the previous government block grants to universities in both the short and medium term (Chowdry et al 2010). Austerity and government choices about the way to deal with the aftermath of the financial crisis have set a context for the development of networked learning that is hard to ignore. Perhaps just as importantly the technologies we use were never neutral and embodied political choices long before the recession. It is many years since Winner identified the inherently political nature of technologies (1986) and Feenberg argued that:

... technology is not a destiny but a scene of struggle. It is a social battlefield, or perhaps a better metaphor would be a parliament of things on which civilizational alternatives are debated and decided. (Feenberg 1991 p14)

Technologies are a site of social struggle and educational technology and networked learning are not exempt from these struggles.

The rise of the MOOCs

The MOOC has become a symbol of the potentials and risks associated with the application of digital and networked technologies in the contemporary university. There are wild claims about the possibility of radical change (Barber et al. 2013) and a widespread public interest which extends to news items and the popular press. Governments and university policy makers feel the need to ingratiate themselves with the new stars in the MOOC universe and there are UK and EU initiatives to develop MOOC platforms to compete with the current North American based offerings (Universities UK 2013). It is hard in this context to remember the early development of MOOCs by Canadian academics associated with the idea of networked learning (Daniel 2012)

The early days of MOOCs were not accompanied by the kind of hype that emerged later. Daniels noted that: The first course carrying the name MOOC was offered in 2008, so this is new phenomenon. Second, the pedagogical style of the early courses, which we shall call cMOOCs, was based on a philosophy of connectivism and networking. (Daniels 2012 p2)

This early form of MOOC has not gone away and the term cMOOC was coined to distinguish connectivist MOOCs (Siemens 2012) from the new forms developed and promoted by a complex of elite universities in the US and private corporate interests, also located in the US.

The origins of the educational idea of the MOOC is still contested, although there is certainty about the role of connectivism in the process. Both Daniels (2012) and Clarà and Barberà (2013a, 2013b) link connectivism with the ideas of Ivan Illich but this is contested by Downes (2013). I have personally linked the ideas of Illich to networked learning, viewing him as a precursor of current ideas:

When Ivan Illich wrote about de-schooling society, in the very early days of computing, he imagined being able to network expertise and interests in ways that then seemed technically difficult, using a mix of computer databases, mail and telephone (Illich, 1970). It is still shocking to read Illich write using the terminology of learning webs, educational objects, skill exchanges and peer matching. These ideas still find their echoes amongst the most technologically forward looking research activities today. (Jones and Dirckinck-Homfeld 2009)

Whether or not there is a direct connection between connectivism and Illich there is, as Daniels noted quoting Illich, a link between the aim of Illich and the aim of cMOOCs, which is: 'to provide all who want to learn with access to available resources... empower all who want to share what they know to find those who want to learn it from them' (Daniels 2012 p3),. This aim stands in sharp contrast to the xMOOCs that are currently so prominent, as they largely embody an instructivist or behaviourist approach to education. The timing of the two forms of MOOC might also be of interest in that the cMOOC arises prior to and at the point of the global financial crisis, whereas the xMOOC rises as the recession and austerity begin to bite. The utopian aims of cMOOCs gave way to an uncertain but definite focus on business and the need for a 'business model' for MOOCs (Barber et al. 2013).

The emergence of xMOOCs is very recent and Daniels sums up the development timeline in this way: Early in 2012 Stanford University offered a free, chunked course on Artificial Intelligence online and 58,000 people signed up. One of the faculty members involved, Sebastian Thrun, went on to found Udacity, a commercial start-up that helps other universities to offer xMOOCs (Meyer, 2012). MIT (2011) announced MITx at the end of 2011 for a launch in spring 2012. MITx has now morphed into edX with the addition of Harvard and UC Berkeley (edX, 2012). Since then similar initiatives from other well known US universities have come thick and fast. There seems to be a herd instinct at work as universities observe their peers joining the xMOOCs bandwagon and jump on for fear of being left behind. (Daniels 2012 p3-4)

At around the time Daniels was writing Coursera another for profit platform was also launching a range of courses mainly in the US but with examples in various countries including the UK (Moocs@Edinburgh Group 2013). It is this wave of activity that gave rise to the flurry of political, policy and public interest in the issue of MOOCs themselves and in the broader question of an innovative challenge to university structures and institutions based on technological developments.

In early 2013 the Institute for Public Policy Research, a generally respected UK think tank produced an essay entitled: "An avalanche is coming: Higher education and the revolution ahead" (Barber et al. 2013). Interestingly the authors are employees of Pearson and the essay is also hosted on the Pearson's web site. Pearson describe themselves as the 'world's leading education company'. Pearson also includes the Financial Times Group and Penguin Random House publishers. The IPPR is not a free market right of centre group and the IPPR web site describes its purpose in this way:

The purpose of our work is to assist all those who want to create a society where every citizen lives a decent and fulfilled life, in reciprocal relationships with the people they care about. We believe that a society of this sort cannot be legislated for or guaranteed by the state. And it certainly won't be achieved by markets alone. It requires people to act together and take responsibility for themselves and each other. (http://www.ippr.org/about-us)

Despite this social market stance the essay proposes an apocalyptic vision as outlined in the Forward by Lawrence Summers the President Emeritus of Harvard University:

An Avalanche is Coming sets out vividly the challenges ahead for higher education, not just in the US or UK but around the world. Just as we've seen the forces of technology and globalisation transform sectors such as media and communications or banking and finance over the last two decades, these forces may now transform higher education. The solid classical buildings of great universities may look permanent but the storms of change now threaten them. (Barber, Donnelly and Rizvi 2013 p1)

Now this is not the first time such warning of a sudden step change in education have been made. In previous years the same kinds of arguments were based on a technological determinist reading of new technology and young people captured in the terms net generation and digital native (for a critique see Jones 2011).

The three fundamental challenges the authors identify are:

- 1 How can universities and new providers ensure education for employability? "Given the rising cost of degrees, the threat to the market value of degrees and the sheer scale of both economic change and unemployment, this is a vital and immediate challenge."
- 2 How can the link between cost and quality be broken? "in the era of modern technology, when students can individually and collectively create knowledge themselves, outstanding quality without high fixed costs is both plausible and desirable."
- 3 How does the entire learning ecosystem need to change to support alternative providers and the future of work? (Barber, Donnelly and Rizvi 2013 p 6)

The report is suffused with corporate style language such as the 'the new student consumer is king and standing still is not an option' (ibid p6). This cannot be thought of as a reasoned contribution to a debate, it is a call to action for policy makers across the higher education system and it is couched in neo-liberal business rhetoric.

The argument, based on new technologies and globalisation, includes a new element, one specifically located in the global crisis:

the global economy is also dealing with a trauma of the worst crisis in modern times, as the consequences of two decades of irrational exuberance slowly unwind. (ibid p11)

Leaving aside whether the crisis can be put down to 'irrational exuberance' the link being made to the crisis is clear and it is placed alongside an argument that the costs of higher education are rising in an unsustainable way. This argument, although largely US based, is extended to the UK and explicitly linked to the new English fee regime. Clearly the avalanche, although justified by technological determinist reasoning, is closely related to contemporary economic circumstances. Throughout the essay there are references to MOOCs as a tipping point, at once both the cause of sudden and discontinuous change and a potential solution to the problems arising from

that change. In this way the MOOC moment is a form of the solutionism which has been so ably criticised by authors such as Morozov (2013) in a book ironically published under a Pearson imprint. Solutionism, Morozov argues, is the recasting of complex social situations as either 'neatly defined problems with definite, computable solutions or as transparent and self-evident processes that can easily be optimised' (Morozov 2013 p5). He goes on to say that this is more than supplying technological fixes to difficult or 'wicked' problems it is finding problems in areas that are not actually problematic at all. The increasing cost of higher education in the IPPR essay is claimed to be a problem for the UK, but the European University Association showed a fall in the percentage of GDP spent on university funding between 2008 and 2013 in 10 EU countries and an increase in eight (EUA 2013). In the UK (England and Wales) they found that university spending is falling as a proportion of GDP. After rising from 2008 to 2011, expenditure fell to 0.46% of GDP, with only Hungary Italy, Portugal and Greece having lower proportional expenditure. This is hardly a problem requiring revolutionary transformation as there has been a nominal change of -10% between 2008 and 2012, -13% if inflation is taken into account (http://www.eua.be/publicfundingobservatory)

The drive to lower costs has been picked up by bodies representing universities in the UK and linked directly to the potential of MOOCs.

MOOCs may also help to restructure and lower the costs of higher education in ways that might be attractive to learners looking for lower cost provision and which presents opportunities for new and existing providers (Universities UK 2013 p2)

It has also been picked up by senior ministers in the UK government responsible for universities for example David Willetts:

Yes, I do think MOOCs are significant, there are people who have been around for a long time, who say that they aren't as new or as significant as the current flurry of excitement, but I first came across MOOCs in California in 2011 and my view is by and large, when the Tech Community in California put their ingenuity and their money behind what they see as the next 'big thing', in the web and the social media by and large, they know what they are doing. And there is a real buzz there and when Goldman Sachs are investing and Stanford say it is significant and big players are coming in, my view is, this is a significant moment in the spread of education, notably, but not only higher education (Willetts 2013)

The remarks made by Willetts show the clear attraction for politicians of the heady mix of large capital and Ivy League endorsement for MOOCs. The positive attractions of MOOCs identified by Willetts included their potential to increase international recruitment, the possibilities of data analytics applied to large student numbers and the possibilities of developing employment skills, specifically IT skills for large corporations e.g. Microsoft who might themselves recognise MOOC based credentials.

Daniel (2012) notes that:

At the heart of MOOCs are the platforms that enable the various operations involved in offering a MOOC to be done effectively. (ibid p 7)

While this focus on platform provides a common core Siemens (2012) has argued that the platforms for the two types of MOOC are different because they serve different purposes. Siemens' claimed that the cMOOC emphasises creation, creativity, autonomy and learning via social networks. In contrast the xMOOC model emphasises an instructivist and traditional learning paradigm using presentations via video and testing. In this way the rise of the two forms of MOOC mirrors the long standing debate between acquisition and participation metaphors in education (Sfard 1998). It also carries on the debate from which the idea of networked learning first arose, between those who saw in digital technologies the possibilities for better and more efficient forms of transmission of educational ideas and those who saw in networked and digital technologies the opportunity to advance a more dialogic and discursive engagement (McConnell et al 2012). MOOCs although they represent a further iteration in the technological platform are not really novel in either educational or business terms. Daniel notes how little attention seems to have been paid by those commenting on the MOOC phenomena to previous experiences, either in the university expansion online in the dot com boom or in the open university movement (Daniel 2012 p9)

The support of the UK government has been important in the launch of Futurelearn a MOOC platform spun out from The Open University (UK). Futurelearn is 'a private company wholly owned by the Open University' that operates with a number of partners to provide courses including universities, the British Council, the British Library and British Museum. Although clearly a 'British' based offering Futurelearn does include some international partners (https://www.futurelearn.com/about). The offering is a standard MOOC platform which clearly envisages some forms of accreditation: 'We're also going to be piloting features that let you take exams

or buy statements of accomplishment as further evidence of your new skills.'

(https://www.futurelearn.com/about/how-it-works). The Open University is also a partner in another MOOC project launched in 2013 OpenupEd (http://www.openuped.eu/). OpenupEd is a European initiative supported by the European Association of Distance Teaching Universities (EADTU). Both these initiatives explicitly reference prior experience of distance and online education and both make mention of open access to resources, although the commitment of Futurelearn is limited: 'Wherever possible, we encourage our partners to make course content open and discoverable...' (https://www.futurelearn.com/about/our-principles). These two initiatives illustrate that MOOCs will not remain a North American based phenomena with global reach, because European politicians and policy makers will want to ensure European representation in what they see as a significant development. The question for networked learning will be to what degree the principles that inform MOOCs will be drawn from the longer tradition of Open and Distance learning, including networked learning, and to what degree they will represent a degradation of these principles and a replication of the instructivist model of xMOOCs.

To summarise, the MOOC 'moment' coincided with the embedding of austerity in advanced industrial countries following the financial crash of 2008. This coincidence proves nothing but it was also marked by a move away from a pedagogy informed by a notion of networked learning with an emphasis on dialogue, participation and the construction of knowledge to a more classically instructivist model based in the transmission of knowledge. The MOOC moment was led by a combination of Silicon Valley expertise with Ivy League elite universities, but it was rapidly taken up by policy makers and advocates of a particular kind of educational reform based on notions of 'disruptive innovation' and 'unbundling' the university . These ideas are not exclusively linked to the rise of MOOCs and other examples can be found where similar prescriptions are based on other, different technological causes (Tapscot and Williams 2010, see Jones 2011 for a critique). Aaaron Brady writing in the New Inquiry argued that:

These MOOCs [xMOOCs] are just a new way of maintaining the status quo, of *re*-institutionalizing higher education in an era of budget cuts, sky-rocketing tuition, and unemployed college graduates burdened by student debt. If the MOOC began in the classroom as an experimental pedagogy, it has swiftly morphed into a process driven from the top down, imposed on faculty by university administrators, or even imposed on administrators by university boards of trustees and regents. From within academia, the MOOC phenomenon is all about dollars and cents, about doing more of the same with less funding. (Brady 2013)

The idea of a MOOC begins with a notion of educational reform based on principles familiar to those involved in the study of networked learning. My own view of the original formulation was somewhat sceptical and I was cautious about a kind of radical individualism that MOOCs seemed to embody alongside a dismissiveness concerning the institutional form of the university. However the re-invention of the MOOC in the US has been accompanied by a re-hashing of technological determinist rhetorics in support of a familiar and stale agenda based on a largely transmissive pedagogy and private interests.

Discussion

Education takes time and resources, in financial terms it costs money. At a time of austerity two questions are posed, how much money can be spent on education and who pays. These are political questions and they are not answered by technological change, even though technologies might make new choices available to educational policy makers. The radical experiment in the UK affecting English students has shifted the burden of costs towards the student in the form of fees, even though the fees are initially paid from state loans. The effect is to change the organising principle away from education as a public good towards making higher education a private concern. Other European governments appear to be moving in a different direction with the last of the German state governments (Länder) withdrawing from charging fees (Mechan-Schmidt 2013). The idea of MOOCs has been enrolled in the debate about the funding of universities and the Campaign for the Public University commented in relation to Futurelearn that:

...the term 'free' appended to 'online courses' is something of a misnomer. FutureLearn is a private company precisely so that it can attract private venture capital and make money for shareholders from MOOCS. The content is apparently free, but the intention is to find a business model by which it can also be paid for in terms of licensing fees for its use within other degree programmes, or through accreditation. (Campaign for the Public University 2013)

The context in which MOOCs offer cheaper or free education is one in which governments are changing the overall framework of public expenditure. In the UK this has meant raising a 'pay wall' for students and making higher education a largely private consumer-based transaction and opening up higher education to new (private

sector) entrants. The withdrawal of fees in Germany shows that these changes are choices and not an inevitable outcome of either economics or technological change. The politics of networked learning have previously been concerned largely with pedagogy and 'small p' politics and little interest has been shown in political regimes or what might be thought of as higher level politics. This paper argues that this approach is unsuitable for a period of recession in which the politics of austerity are recasting educational technology in a narrow way. The example of the development of idea of the MOOC illustrates the tensions researchers can expect to see emerging.

The public interest is one aspect of education viewed as a site of negotiation between a variety of contending interests. Networked learning has an interest in the kind of higher education that is provided and in the nature of the contemporary university (Goodfellow and Lea 2013). Networked learning takes place in a network society in which power is dispersed between a variety of economic and state actors but which nonetheless still has key centres of power (Castells 2009). Castells identifies four key forms of power in a network society:

- Networking power (inclusion or exclusion from networks)
- Network power (standards and protocols of networks)
- Networked power (a dispersed and relational capacity to impose)
- Network making power (constituting, setting goals and forming alliances)

To these given the recent revelations about the NSA and GCHQ and more longstanding concerns about the Great Firewall in China we might add network surveillance power. Networked learning is concerned with all these forms of power. It is interested in who is included in, and who is excluded from the production, circulation and reproduction of knowledge. Researchers are also interested in the ways standards and protocols, essential to networks, can squeeze out the nonconforming and the ways in which the network mechanisms operate to set these standards. Governments at a variety of levels still have a key role to play by imposing legislative frameworks in which networked learning operates, but they exercise this networked power in relation to a wider set of contending powers, e.g. corporations, the press and multi-national actors. Networked learning is also affected by the network making power of those actor networks that frame the goals, visions and projects that constitute not only existing networks but frame their future development. It is in this kind of actor network that key power brokers operate, connecting and filtering activity across the network, acting as network 'switches'.

In an Epilogue to their exploration of the politics of educational technology Facer and Selwyn set the following challenge:

...for researchers to take an active role in locating themselves as part of wider movements of resistance alongside those teachers, student groups, civil society, and nongovernmental organisations who are making the case for education as a means of personal and social emancipation (Selwyn and Facer 2013 p218)

In broad terms this seems like a sensible response to contemporary conditions but I would add that there may be a need to be explicit in including traditional forms of political action via trade unions and political parties. In an age of austerity it is necessary to consider the distribution of resources between different elements in the economy. One of the rationales for the development of MOOCs has been that they allow for the introduction of new entrants into higher education. Multi-national corporations, often engaged directly or indirectly in higher education, can move their profits from one national system to another, using licensing arrangements and transfer pricing, and thus avoid taxation. This enrichment of private corporations at the expense of the public purse either increases the pressure to cut public services or to increase taxation on the wider public. For there to be a public higher education system, within which networked learning can develop, there needs to be resistance to the inclusion of private sector corporations that do not pay their share of national taxes. This might affect corporate provision of cloud computing services and the direct provision of specific services to public higher education (e.g. distance learning) as well as the development of fully private providers. The pressure is relentlessly for private providers to maximise profit. In the US private universities spend a large proportion of their income on marketing and a focus on the most profitable courses and subject areas (Reuters 2012). Public education has a different set of motivations that are central to the preservation of the pedagogic values associated with networked learning.

Conclusion

The conclusions I draw from the discussion above is that networked learning needs to pay greater attention to formal or 'high' politics if it is to maintain its position in higher education. Communication, collaboration and dialogic methods of education are not exclusive to public education and they can be found in business schools and practiced by private consultancies. However across the full higher education sector the role of public money

and the unique place of the university as a protected island of academic freedom is essential for the development of an environment in which networked learning can flourish. The example of the rapid transition from cMOOCs to xMOOCs illustrates the ways in which commercial and financial concerns can affect pedagogic decisions and significantly influence a policy environment.

Secondly in so far as the MOOC moment leads towards the development of the MOOC as a new platform networked learning researchers should take a keen interest in the kinds of pedagogies these new platforms instantiate and encourage. Even the xMOOC moment has led to some brave and interesting experiments. The Edinburgh MOOC "E-learning and Digital Cultures", although based on the Coursera platform applied a pedagogy more usually associated with cMOOCs (Knox et al. 2012). The new xMOOC platforms are no more determinist than any other technology and those interested in networked learning should experiment to explore the limits that these platforms allow.

References

- Barber, M., Donnelly, K., and Ritzvi, S. (2013). An avalanche is coming: Higher education and the revolution ahead. London: IPPR. http://www.ippr.org/publication/55/10432/an-avalanche-is-coming-higher-education-and-the-revolution-ahead [viewed 17 January 2014]
- Brady, A. (2013). The MOOC Moment and the End of Reform. The New Inquiry.

 http://thenewinquiry.com/blogs/zunguzungu/the-mooc-moment-and-the-end-of-reform/ [viewed 17 January 2014]
- Campaign for the Public University (2013). MOOCs and the University Mission.

 http://publicuniversity.org.uk/2013/09/13/moocs-and-the-university-mission/ [viewed 17 January 2014]
- Castells, M. (2009) Communication Power. Oxford: Oxford University Press.

 Chowdry, H., Dearden, L, Wyness, G. (2010). Higher Education Reforms: Progressive but Complicated with an
- Unwelcome Incentive (IFS Briefing Note 113). http://www.ifs.org.uk/bns/bn113.pdf [viewed 17 January 2014]
- Clarà, M., and Barberà, B. (2013a). Learning online: massive open online courses (MOOCs), connectivism, and cultural psychology. Distance Education, 34:1, 129-136
- Clarà, M., and Barberà, B. (2013b). Three problems with the connectivist conception of learning. Journal of Computer Assisted Learning. Early view. Online: DOI: 10.1111/jcal.12040
- Daniel, J. (2012). Making Sense of MOOCs: Musings in a Maze of Myth, Paradox and Possibility. Journal of Interactive Media in Education. http://jime.open.ac.uk/2012/18 [viewed 17 January 2014]
- Downes,S. (2013). On the Three or Four problems of Connectivism. http://halfanhour.blogspot.ca/2013/10/on-three-or-four-problems-of.html [viewed 17 January 2014]
- edX (2012). UC Berkeley joins edX. https://www.edx.org/press/uc-berkeley-joins-edx [viewed 17 January 2014]
- EUA (European Universities Association) (2013). EUA's Public Funding Observatory Report Spring 2013. http://www.eua.be/Libraries/Governance Autonomy Funding/EUA PFO report 2013.sflb.ashx [viewed 17 January 2014]
- Feenberg, A. (1991). Critical Theory of Technology. New York. Oxford University Press.
- Fox, S. (2005). An actor-network critique of community in higher education: implications for networked learning. Studies in Higher Education. Vol. 30, No. 1 pp. 95–110
- Goodfellow, R. and Lea, M. (Eds) (2013). Literacy in the Digital University. London: Routledge.
- Greener, I., and Perriton, L., (2005) The political economy of networked learning communities in higher education. Studies in Higher Education. Vol. 30, No. 1 pp 67-79
- Ilich, I. (1970). Deschooling society. New York: Harper and Row. Full text available online http://www.preservenet.com/theory/Illich/Deschooling/intro.html [viewed 17 January 2014]
- Jones, C. (2001) Do technologies have politics? The new paradigm and pedagogy in networked learning. Technology Pedagogy and Politics What next? Mount Royal College, Calgary, AB, Canada, May 4-5, 2001. Available from: http://oro.open.ac.uk/33381/ [viewed 17 January 2014].
- Jones, C. (2002). The Politics of Networked Learning (Symposium 8) In Banks, S, Goodyear, P, Hodgson, V and McConnell, D. Networked Learning 2002: A research based conference on e-learning in Higher Education and Lifelong Learning. Sheffield. University of Sheffield. http://www.networkedlearningconference.org.uk/past/nlc2002/proceedings/symp/08.htm [viewed 17 January 2014].

- Jones, C. (2002a). Is there a policy for networked learning? In Banks, S, Goodyear, P, Hodgson, V and McConnell, D. Networked Learning 2002: A research based conference on e-learning in Higher Education and Lifelong Learning. Sheffield. University of Sheffield.
- Jones, C., and Dirckinck-Holmfeld, L., (2009) Analysing Networked Learning Practices: An Introduction. In Dirckinck-Holmfeld, L., Jones, C., and Lindström, B. Analysing Networked Learning Practices in Higher Education and Continuing Professional Development. Rotterdam: Sense Publishers, BV.
- Jones, C. (2011). Students, the Net Generation and Digital Natives: Accounting for educational change. In Thomas, M (Ed). Deconstructing Digital Natives: Young People, Technology and the New Literacies. London & New York: Routledge.
- Knox, J., Bayne, S., Macleod, H., Ross, J. & Sinclair, C. (2012). MOOC Pedagogy: the challenges of developing for Coursera. http://newsletter.alt.ac.uk/2012/08/mooc-pedagogy-the-challenges-of-developing-for-coursera/ [viewed 17 January 2014]
- Land, R. (2006). Networked Learning and the Politics of Speed: a Dromological Perspective. In S. Banks, V. Hodgson, C. Jones, B. Kemp, D. McConnell and C. Smith (eds) Proceedings of the Fifth International Conference on Networked Learning 2006. Lancaster: Lancaster University. http://www.networkedlearningconference.org.uk/past/nlc2006/abstracts/pdfs/P16%20Land.pdf [viewed 17 January 2014].
- McConnell, D, Hodgson, V., and Dirckinck-Holmfeld, L. (2012). Networked Learning: a brief history and new trends. In L. Dirckinck-Holmfeld, V. Hodgson and D. McConnell (Eds). Exploring the Theory, Pedagogy and Practice of Networked Learning.(pp-3-24) New York: Springer.
- Mechan-Schmidt, F. (2013) Unbridled Success: German Fees Foes Claim Victory. Times Higher Educational Supplement. http://www.timeshighereducation.co.uk/news/unbridled-success-germanys-fee-foes-claim-victory/2003928.article [viewed 17 January 2014]
- Meyer, R. (2012). What it's like to teach a MOOC (and what the heck's a MOOC?)

 http://www.theatlantic.com/technology/archive/2012/07/what-its-like-to-teach-a-mooc-andwhat-the-hecks-a-mooc/260000/ [viewed 17 January 2014]
- MIT (Massachusetts Institute of Technology) (2011). MIT announces online learning initiative. http://web.mit.edu/newsoffice/2011/mitx-education-initiative-1219.html [viewed 17 January 2014]
- Moocs@Edinburgh Group (2013). Moocs@Edinburgh Report #1. http://hdl.handle.net/1842/6683 [viewed 3 Oct 2013]
- Morozov, E. (2013). To Save Everything Click Here: Technology, solutionism and the urge to fix problems that don't exist. London: Allen Lane.
- Oliver, M. (2011). Technological determinism in educational technology research: some alternative ways of thinking about the relationship between learning and technology. Journal of Computer Assisted Learning, 27 (5), 373-384.
- Reuters (2012). U.S. for-profit colleges spend big on marketing while slashing other costs.

 http://www.reuters.com/article/2012/11/28/net-us-forprofitcolleges-analysis-idUSBRE8AR0FJ20121128
 [viewed 17 January 2014]
- Selwyn, N., and Facer, K. (2013). The Politics of Education and Technology: Conflicts, Controversies, and Connections. New York: PalgraveMcMillan.
- Sfard, A. (1998). On two metaphors for learning and the dangers of just choosing one. Educational Researcher, 27(2), 4–12.
- Siemens, G. (2012). MOOCs are really a platform. eLearnspace.
 - http://www.elearnspace.org/blog/2012/07/25/moocs-are-really-a-platform/ [viewed 17 January2014]
- Tapscott, D. and Williams, A. (2010). Innovating the 21st century university: It's Time. Educause Review, Vol. 45, No. 1, 17-29. http://net.educause.edu/ir/library/pdf/erm1010.pdf [viewed 17 January 2014]
- Universities UK (2013) Massive open online courses: Higher education's digital moment?
- http://www.universitiesuk.ac.uk/highereducation/Documents/2013/MassiveOpenOnlineCourses.pdf [viewed 17 January 2014]
- Willetts, D. (2013) Address to QAA "We need to talk about quality: MOOCs", 8th July 2013. QAA podcast http://www.qaa.ac.uk/Publications/Podcasts/Transcripts/Pages/David Willetts MOOCS speech 8July2013. aspx) [viewed 17 January 2014]
- Winner, L. (1986). Do Artifacts Have Politics? In Winner, L. The whale and the reactor: a search for limits in an age of high technology. Chicago: University of Chicago Press, pp 19-39.(Reprinted in The Social Shaping of Technology. MacKenzie, D., and Wajcman, J. (eds) (1999) [2nd Edition] London: Open University Press pp 28-40)