

Expanding the concept of Networked Learning

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Abstract

This paper is founded on the belief that the concept of Networked Learning, especially as defined by some of its key protagonists, deserves wider uptake and consideration, not least in the Networked Learning Conference. I will therefore attempt to provide a number of suggestions as to how this could be achieved. These will be based around two approaches. Firstly, to explore what might distinguish a student who had 'Networked Learned', and secondly, to broaden the usual meaning of the key concept of 'promoting connections' to consider factors which influence the take-up of Networked Learning. The intention is to promote discussion of the place of Networked Learning amongst the community of its researchers and practitioners.

Keywords

Networked Learning, Promoting Connections, Learning Theory

Introduction

In this paper I want to explore the concept of networked learning in a way that has too rarely been attempted in the history of the conference or, indeed, the term. It struck me while preparing another publication, early in 2007, that the Networked Learning conference feels like 'just another e-learning conference'. This was partly a reflection from attendance at the 2004 and 2006 conferences. I also went back and checked this with proceedings of all past Networked Learning conferences (Asensio, Foster, Hodgson, & McConnell, 2000; Banks, Goodyear, Hodgson, & McConnell, 2002, 2004, 2006; Banks, Graebner, & McConnell, 1998). It is also true of key texts like the recent 'Advances in Research on Networked Learning'; for example, in 'Facilitating debate in Networked Learning' (Pilkington & Walker, 2004) the authors only use the term in their 'Summary and Conclusions' (p. 86-87). Even then it could easily be exchanged with Computer Supported Collaborative Learning (CSCL) or the even broader term 'e-learning'. Everywhere else in the chapter the authors refer to Computer Mediated Communication (CMC).

Some key networked learning protagonists were involved in developing a definition of networked learning:

Learning in which information and communications technology (ICT) is used to promote connections: between one learner and other learners, between learners and tutors; between a learning community and its learning resources. (Goodyear & NLinHE Team, 2001 p.9)

Although the essence of networked learning may be represented 'in amongst' the proceedings, there is a sense that papers are being included so long as they have something to do with learning technology: there may not have been a single conference without them.

I think this needs to be highlighted and addressed since it misses out on an important contribution that networked learning could make to learning theory and practice, not least with the rise of social networking applications. Research into learning technology has been criticised as too small scale (Phe, Robinson, & Levin, 2005), or even just inept (Mitchell, 2000) for a number of reasons (Rushby & Cowan, 2006). One of these is the failure to build upon established theory and research which is essentially an inexcusable failure to learn from the past. Searching the jiscmail Networked Learning archive for 'Networked Learning' and 'definition' indicates that the membership has not used jiscmail to discuss the concept. There was a brief exchange in October 2000, with Chris Jones asking, 'What exactly is e-

learning and does it differ from the networked learning addressed by this list?' (sic) (Jones, 2000). Peter Goodyear's reply predicted that if we conflate eLearning as:

all that CAL/CAI/CBT stuff we've been doing for years plus what we can do now on the Web' then the whole field will actually move back rather than forward (just as it did with the introduction of the PC in the early 80's, he said, contentiously) (Goodyear, 2000)

In failing to pick up the aforementioned definition of networked learning to distinguish it from 'e-learning' (or CSCL or CMC), this conference has helped to fulfil Goodyear's prophetic word. As a term, e-learning has irrevocably entered public parlance although there are signs that it may be going out of fashion: what was to be an e-learning strategy for Wales (Higher Education Funding Council for Wales, 2007b) now talks about 'Enhancing Learning and Teaching through technology' (Higher Education Funding Council for Wales, 2007a). This is an improvement but still leaves learning technology research and practice in need of enduring and theoretically robust foundations. A body of work with this potential has emerged around 'communities of practice' (CoP) and 'computer supported collaborative learning' (CSCL). These concepts have been criticised because the terms 'community' and 'collaboration' privilege a 'certain closeness and unity of purpose' and 'human-human relations' (Jones, Ferreday, & Hodgson, 2006, p.1) which may be unnecessary or even undesirable for learning to take place (*ibid.*). Furthermore, networked learning as a concept is broad enough to subsume the use of learning resources without violating the natural sense of the term. Note James Inman's (2004) ingenious attempt to bring the act of reading under the umbrella of collaboration: he asserts that 'collaboration occurs across generations' (Inman, 2004, p.49) in as much as the reader is working with an author's artefact. However, where there is no potential for both parties to engage in dialogue, this must violate the natural sense of collaboration which requires two-way communication (Dillenbourg, 1999).

With reference to Chris Jones' work, questions around the concept of networks may provide a way forward (Jones, Dirckinck-Holmfeld, & Berner, 2005; Jones & Esnault, 2004; Jones et al., 2006). In this paper I am attempting to stoke the discussion by presenting two sorts of interpretations of the 2001 definition of networked learning: one that narrows the concept and another that broadens its focus.

The essence of the first proposition is in the form of a question: What does it mean to be 'networked learned' (Johnson, 2007)? Reading the term in this, albeit clumsy, way allows us to consider networked learning as a learning objective.

For the second proposition I turn to work from my recent Masters in Advanced Learning Technology. In the Final Project Report (dissertation) I argued that the Guidelines (Goodyear & NLinHE Team, 2001), as with other such documents (e.g. Joint Information Systems Committee, 2004), presume student engagement or dismiss non-engagement as something that would be resolved over time; engagement which was vital to sustain meaningful networked learning opportunities and communities. I proposed a widening of the definition of networked learning with special reference to the meaning of 'promoting connections'. For successful episodes of networked learning, the designer's attention must be given to 'promoting connections' of technology use in the minds and lives of all involved (see Johnson, 2008).

What does it mean to be 'Networked Learned'?

In June 2007 I posted the following message to the networked learning jiscmail list :

I have been thinking about the definition of networked learning and what it means for assessment - especially the central notion of 'promoting connections'. I've come to a question I think might be worth pursuing - what does it mean to be 'network learned'? That is, if one had gone through a degree programme that was designed to 'promote connections', what would characterise the students who graduated from it? Perhaps they would just be the 'embodiment of critical thinking', or some other commonly held aspiration for a modern graduate...

Unfortunately, the 2 responses were about the means of conducting assessment via networks rather than the learning outcomes that any assessment might measure. Perhaps the medium of e-mail is conducive to

scan-reading but these pragmatic responses to an avowedly theoretical question surprised me. Before I read too much into this I tried to re-word the question and eventually sent the following:

I mean, what would a person look like, what would make them different (better even?) from someone who had learned via Communities of Practice or lectures/tutorials? My colleague Joe's off-the-bat response to that was 'appropriateness'. Having the 'right' clutch of the 'right' kind of connections that can be 'activated' (all inverted comma concepts in need of unpacking!) in a timely way - not just to people but to resources (of course). Is that a good measure of networked learningness? (am I a good example of having been 'networked learned' since I'm foisting this on your inbox via this jiscmail list?!) Assuming it should, can that be bottled and taught? Can it then be factored in to assessment leading to accreditation? As I said before, all of this might 'just' mean the kinds of things we already hope to see in 'good' students...

This drew just one response that suggested I redirect my question to the original networked learning protagonists. I decided to try another medium, i.e. this conference, instead.

I am not claiming these as necessarily original thoughts. They chime with Siemens' *Connectivism* (2005) and Rennie and Mason's *Connecticon* (2004). What I find troubling about these accounts is their underlying commitment to the post-modernist position that, because it is essentially unknowable, i.e. changing so fast, we can have no certain or enduring knowledge of the world. However, they miss the fact that absolute truth is not a requirement for effective action. As Goodyear (1998) explains, the ability to learn and act in a context of 'organisational fictions' while suspending the need for absolute truth (as in the *ceteris paribus* assumption), enables co-ordinated purposeful activity to take place. Perhaps that explains why they fail to deal with the harsh realities of assessment and a society that still values the accreditation of learning, *even* learning which takes place in Higher Education Institutions. There may well be 'blurring of the distinctions between the producers and consumers of information' (Rennie & Mason, 2004, p. 152), but the scholar's role as arbiter of what counts as a pass is still a powerful indicator of status within an online discussion list (Jones, 1999). Leander's 'Wired bodies in the wireless classroom' (2007) illustrates how academic cultures can prove amazingly resistant to the assumed unstoppable march of technology. Nor should we take it for granted that the digital super-learners who write online fanfiction, spawn memes and mash-up for fun (Lankshear & Knobel, 2006) will always be able to do so or even want to do so. The rise and fall of social networking sites shows that technologies change at a terrific rate but also people's lives move on and people can fall out of as well as into incessant use of the Internet (Kingsley & Anderson, 1998).

What then is networked learning as something that is learned? Is it a body of knowledge, a process, a quality or a skill? When someone has been doing networked learning, what will have changed about them?

For at least ten years, Peter Goodyear has avered a central place for 'epistemic fluency' within higher education learning (Goodyear, 1998; Zenios & Goodyear, 2008). Crudely put, this entails training students to recognise the need for, select and use the appropriate epistemic game or form to engage with knowledge and ways of knowing in whatever environment they inhabit. I am suggesting a place here for networked learning amongst the list of epistemic strategies that students need to add to their personal knowledge-working toolset. Just as they may need draw up a list to 'play' a 'compare-and-contrast game' (Morrison & Collins, 1996, p. 111), or use some other cognitive tool to play some other epistemic game, in terms of networked learning, as I am arguing for it here, students may need to create or activate a network node at which someone or something is located. I think Siemens comes close when he describes an 'ability to synthesise and recognise connections' and a 'capacity to form connections between sources of information, and thereby create useful information patterns' (Siemens, 2005).

One plausible elaboration of this comes from Nardi, Whittaker and Schwarz (2000). In ethnographic research on workplace personal social networks they devised the term 'netWORK' to describe the 'ongoing process of keeping a personal network in good repair' (no page number). netWORK is comprised of building, maintaining and activating the network. Activating selected nodes requires a networker to choose the appropriate medium and language.

This is useful because it highlights the fact that it is rarely enough to 'promote connections'. Once the connections are made, then what? Requisite skills might include knowing how many connections are tenable, or how to marshal an element of affective intelligence so as to appreciate how even brief messages can chill or foster the network:

... where a single point, quip or query is offered as a response to a substantive posting. While these may be interpreted as an indication of "breadth not depth" quality of on-line exchanges (cf. Guzdial, 1997), they also serve the social function of confirming the "presence" of the listeners. (Graebner, 1998, p. 1.70).

I think networked learning formulated in this way in a higher education context can contribute towards students' development of 'epistemic fluency' (Morrison & Collins, 1996), which, according to Goodyear and Ellis (2007), deserves a central place in 21st Century learning. Networked learning in this sense is one of an arsenal of meta-cognitive skills or strategies that students ought to be equipped with as a result of study at Higher Education Institutions.

To return to the rhetorical question I sent to the networked learning JISCmail list, is 'networked learning' accreditable? What would good performance look like? Or is this a meta-skill that we should design-in to the process of learning to give it the requisite situatedness?

If particular models of epistemic fluency operate within subject domains or knowledge ecologies then there are likely to be better and worse ways to perform these 'knowledge-building practices' (Goodyear & Ellis, 2007, p. 60). Within higher education, facile as it seems, I can envisage the classic assessment vehicles being adapted to assess networked learningness. Extended essays have usually required authors to show that they have critically engaged (connected) with the best current scholarship, while the learning portfolio can be adapted to demonstrate almost any type of accomplishment.

Taking a broader view of 'Promoting Connections'

For Marc Prenski (2001), George Seimens, Frank Rennie & Robin Mason, and perhaps some of my readers, the horizon is so packed with digital super-learners that the issues around why this recent school-leaver might not wish to 'e-volve' will continue to frustrate and mystify them:

We had a computer course in school, I was always way behind then, instead of listening I was playing the 'worm game' [on the computer]... it was either doing that or RE [religious education]... sometimes we did stuff but nothing I remember. (Selwyn, Gorard, & Furlong, 2006, p.164)

Prenski *et al* miss the fact that there are still many people who are just not interested in ICT or do not expect to have to engage with complex use of ICT on a daily basis or have actively turned away from ICT. At the most prosaic and yet telling level, Selwyn *et al.*(2006) found that many people simply did not need ICT to carry on their daily lives and so did not engage with it.

For these people there is still a job to do to narrow the gap between learners and learning technology. We may accept that 'promoting connections' between people and between people and their learning resources using information technology is a worthwhile enterprise, yet the realisation of this vision is reliant on an array of environmental, technological, psychological, social etc., factors. The complexity of these interacting factors is easy to downplay. For example, in the Guidelines (Goodyear & NLinHE Team, 2001), the passage of time is assumed to be sufficient to resolve the obstacle of a lack of IT skills. The footnote in p. 105 argues from telephone survey data to suggest that there is already sufficient progression with IT skills that tutors no longer need worry about this. Even if that were true, the measure of relevant IT skills students have is just one link in a chain of more or less weak links. In 'traditional' higher education settings, lecture or library, environmental 'noise' on-campus is at least experienced by everyone at once. When students create and manage their own learning environments multiple constellations of complicating factors are introduced. For example, it cannot be presumed that students' access to the course website is uniform, even from moment to moment. Learning to manage these

situations and still attain the exit award has been part and parcel of higher education for a long time, but 'books don't crash' (Janet, 2001).

I am not desecrating 'online learning' in favour of 'traditional methods'. I am arguing that the subtleties of deploying learning technologies require great care: I believe it would constitute a huge step forwards for learning and teaching in higher education if institutions finally began to take advantage of the wealth and wisdom contained in the Guidelines (Goodyear & NLinHE Team, 2001).

So how do we promote connections in the minds and lives of the students so that the potential for successful learning will be maximised rather than inhibited through lack of engagement?

In addressing student non-engagement with ICT, Neil Selwyn (2003) states that there are at least 3 options:

1. Restructuring of HE around ICT: Making ICT engagement unavoidable through, for example, putting key processes online (e.g. registration, enrolment, assessments submission and marking). This will also affect academic and support staff who, let it never be forgotten, play a vital role in engendering or undermining a culture of networked learning. McNaught and Kennedy (2000) describe how a 'top-down' and 'bottom-up' approach can support this kind of change.
2. Realistically embedding ICT within existing practices in HE:
'concentrating on facilitating genuinely useful engagement with ICT, such as structured and supported use of the Internet, within the processes of a degree' (Selwyn, 2003, p. 29).
In the case of the humble reading list, locating articles 'manually' requires accessing the institution's online library catalogue, locating the online journal's home page, navigating to the correct year/volume number to eventually arrive at the desired article. If the reading list referenced journal articles through the DOI (Digital Object Identifier) system (see www.doi.org) this simplifies a student's path to the resource while keeping within copyright regulations. It also leads them to an easy method for streamlining recursive use and sharing of articles that students can also then benefit from.
3. Accepting the status quo: Recognising that ICT is as fragmented and ineffectively used as any other learning resource, this option requires staff to adjust their expectations accordingly.

In other words, promoting connections between students other actors and their resources via ICT with various levels of obligation so that they are required or encouraged to exploit the affordances of networked learning. The hoped-for trajectory is for students to see themselves as 'apprentice knowledge workers who learn through increasingly sophisticated and confident participation in communities of practice' (Goodyear, 1998).

Corollary to that, if networked learning is about the ways and degree to which a programme promotes connections between people and resources, it could function as a high-level pedagogy and learning and teaching quality measure in higher education. Consider the lecturer who, having announced some set reading, then proceeds to spend the rest of the lecture working on their overdue grant application. On the other hand, when the same scholar is less pre-occupied, a lecture using well-crafted presentation media that succeeds in promoting connections between a 'learning community and its learning resources' is the lecturer's high-level aim and the evaluative question can be asked, did it or did it not achieve that end? In the former lecture, almost nothing was done to promote connections. Even a simple reading list could have done more in providing students with links to explore, laying a path to promoting student's cognitive connections (King, 2007).

Failing to pedagogically promote connections can lead to expensive resources lying in abeyance, as was highlighted in Goodyear & Jones's (2003) evaluation of the DNER (Distributed National Electronic Resource - now www.jisc-collections.ac.uk). The DNER project teams had not planned a pedagogical strategy to join up learners with meaningful use of the resources. In contrast, consider Rimmershaw's perceptive observation concerning:

'...physical conditions, the initial induction process, the tutor's participation style, and the assessment practices. None of these are particularly surprising, but the experiences reported here indicate that learners respond differently to quite fine differences in the instantiation of the course design.' (Rimmershaw, 1998, p. 1.49)

Conclusion

This paper is presented from a concern to see learning technology research and praxis improve through locating and grounding itself upon suitable theoretical foundations. I believe that there is scope for 'networked learning' to be that foundation but this modest piece will not accomplish much. My hope is that it will at least stimulate discussion and encourage readers to consider or re-consider networked learning as a basis for their work.

I have suggested just two ways, amongst potentially many, in which this could be done:

1. By envisioning networked learning in terms of 'promoting connections' as an aspect of epistemic fluency which higher education ought to foster if not assess and accredit.
2. By seeking to take a holistic view of 'promoting connections' to encourage more pervasive engagement with advanced and advancing use of technologies for knowledge work. It should be carefully designed-in to learning opportunities - requiring/obliging/suggesting that students actively connect with their peers and available learning resources.

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