

Do digital literacies have politics? (0031)

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Abstract

The discourses of “digital literacy” are dominated by values, assumptions and language which stress generic and measurable expressions of “literacy” and bias the field to a view of digital literacy as constituting competency. Alternative views of digital literacy have been present in the discourse since the 1970s, envisioning approaches aimed at helping populations of learners raise their consciousness of how technology and information can be used to address their own problems in local contexts, but these have typically been subservient to competency-based approaches. However, bearing in mind the UK government’s recent curriculum changes to computing in schools, the neglect of a more critical approach to digital literacy is potentially damaging to the effective use of computing in higher education and in industry. The dominant political discourse of digital literacy is thus shot through with tensions and contradictions.

1000-word paper

The title of this contribution alludes to Winner’s famous article (1986) in which he asked, ‘Do Artefacts have Politics?’ His answer was firmly that they did. Technological artefacts are not just hardware, but emerge from, and are embedded, in social systems shot through with inequalities and power relations. These shape and constrain how the artefacts can be used, and how access to the benefits the technology brings can be limited and controlled.

Similar ideas apply to the notion of ‘digital literacy’. The language in use around the term is what Bakhtin (1981, 272) called ‘centripetal’, pulling towards definitions made by the powerful interests at the centre of education and political systems, in the UK or elsewhere. These conclusions can be supported by re-examining the history of the concept, particularly two papers published in 1976 which offer a quite different perspective.

Nevison’s description of Dartmouth College, US (1976; Whitworth 2009, 84-5) describes how in this prestigious liberal arts institution at that time, 90% of graduates would have used a computer at some point in their education. Moreover:

The growth of computing among the students and faculty at Dartmouth has been organic. It has proceeded at an unhurried pace where students and faculty learn to program largely on their own.

A new instructor at Dartmouth will find computing all around him. At a faculty meeting about half of those attending will have used computing and almost one-quarter will have included it in their teaching in the last year.

Dartmouth undoubtedly benefited from being home to BASIC, the computer language which revolutionised home computing and programming in the 1970s by making programming accessible to those without prior training in mathematics or information science. But this is precisely the point; through provision of a supportive infrastructure, resources were made available in an environment which was conducive to developing what might now be called “digital makers” (see the UK Digital Skills Taskforce interim report, 2014), able not just to exhibit general competencies, but apply them in developing applications to fit specific contexts or solve specific problems. This is a view of ‘literacy’ that sees it as *production*, not just functional skills.

The second 1976 paper is by Hamelink. He discusses information literacy, but his perspective is highly relevant to digital literacy as well. His view of literacy is based firmly on the ideas of Freire, particularly *The Pedagogy of the Oppressed* (1970). In this work, Freire claims that the functional view of literacy is one that pushes ways of thinking — that is, structures of language use, of underlying values and assumptions — onto oppressed populations, continually replicating and thus sustaining the authorities which oppress. Freire’s critical literacy pedagogy is based around raising

the critical consciousness (in Portuguese, *conscientização*) of the learners, which can only be done within the specific social contexts in which the learners exist, as opposed to pushing generalised principles and concepts through the education system.

Hamelink updates Freire for the information age. He sees the broadcast media as the principal agent for pushing views and perspectives that justify, and thus help replicate, structures of inequality and oppression. For Hamelink, instead of “literacy” connoting an acceptance of the authority of the dominant interests in society, this approach distributes authority among the members of the community as they collectively *steward* their informational and technological environment (see also Wenger, White and Smith 2009). Through this, communities appreciate the value of their own stocks of information and applications of technology, and work to educate each other, distributing context-specific knowledge, and thus, authority over information and technology practice, more widely among the community.

These more radical views of information and digital literacy did not disappear, even if they remained subservient to competency-based approaches (such as the European Computer Driving License and the ACRL standards of information literacy) for much of the next four decades. The work of Eubanks (2011), for example, is a clear example of a community-based, context-specific and critical approach to developing and supporting digital literacy. Whitworth (2009; 2014) has drawn on critical theory and discourse analysis, amongst others, to elaborate models of information and digital literacy that aim to “train the eyes” of educators, to see where authority is being confirmed by educational practice, rather than being scrutinised, challenged and if necessary, reviewed.

However, in the UK, the “Shutdown and Restart” report published by the Royal Society in 2012, though it defined digital literacy as fundamental to the application of computing in science, industry and everyday life, did so in a way that permitted the Department of Education to effectively remove it from the curriculum. Though a healthy “digital maker” community has grown around initiatives such as the Raspberry Pi, the “computational thinking” approach is the one now sanctioned, and teachers are finding it difficult to embed any kind of criticality within (Banks 2015).

Can a more critical, creative and innovative approach to digital and information literacy be embedded within higher education institutions? In the light of industry demands to produce adaptable and creative learners, this view of digital literacy cannot be omitted from the curriculum. But this claim also highlights the tensions and contradictions which are inherent in the politics of education. Digital literacy, in the forms foreseen by Hamelink and put into practice by Eubanks among others, are radical democratic practices, but this puts them out of step with the dominant discourses within universities, other organisations and society. This presentation will conclude by observing that despite the pressures weighed against it, this kind of community-based, bottom-up development of digital literacy can, and does, still take place. What educators need to do is recognise its fundamental value to their profession, and train their eyes to see it, acknowledging that a wide range of different names and languages may be describing it.

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