Less will be More:

Harnessing Web Science and Design to Manage Complexity in Future Learning Landscapes

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Extended Abstract

The future web will almost certainly provide limitless opportunities for social learning and interaction through new or emerging technologies. This will require a better understanding of the web, through 'Web Science' [1], and foregrounding a more profound role for 'Design' in future learning landscapes. These perspectives will be necessary to ensure that we manage complexity and support or promote desirable practices and discourage, or engineer out, undesirable ones. These are also two key perspectives that need to combine to provide a framework, or lens, that can be used to guide the development, and convergence, of pervasive computing, social media and the semantic web within future learning landscapes.

A problem with all these areas at the moment is that they are so complex to conceptualise, that predictions about future learning landscapes are likely to be mostly guesswork or lists of socio-technical possibilities. So, to help us to consider likely realities this talk will deliberately focus on how an approach of Deep Learning Design [2] can be applied to promote and guide practices within future learning landscapes along pedagogical lines, in ways that will be shaped by the future of the web as a 'social machine [1].

This position was particularly emphasized in a recent Journal Special Issue on 'Social Software, Web 2.0 and Learning' [3], which emphasized the need to employ new forms of pedagogical design within emerging technologies and learning landscapes. These designs needed to reconfigure attested notions of pedagogy but render these in new ways that exploited, and were relevant to, the developing digital literacies of learners and teachers. For example, contemporary thinking in this area employs new concepts, such as

ambient pedagogy [4] and managed openness [5]. This is a position that has also been further explored and developed in a recent International Symposium [6]. It is a relatively natural extension of this thinking to include the related role of pervasive computing and the semantic web, because it is clear that all these perspectives will need to be more closely orchestrated to produce the sort of contextualised interaction and meaning making that will lead to learning and knowledge development in the future.

Further exemplification of possible future scenarios will be provided through thought experiments that will re-think the challenges of current TEL projects in terms of the discussed approach. In particular, I will 'imagineer' how the challenges addressed by relatively large scale UK and EU funded projects in Digital Dialogue Games and Continuous Social Learning in Knowledge Networks could be rendered in future learning scenarios.

Finally, I will consider new design metaphors for future learning, that place the person, their social behaviour and their community at the centre of the design process and the resulting TEL technologies. This will argue that whilst the future learning landscape will be characterized by the greater penetration of the web within our everyday lives, fundamentally, we must remember that we will still be, mostly, people socially interacting with other people.

References

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