CROSS-SECTOR POLICY NETWORKS AND THE CONSTRUCTION OF 'LEARNING TO CODE' IN THE NEW COMPUTING CURRICULUM

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Computer programming, or learning to write computer code and construct algorithms, is a major part of the new Computing curriculum being introduced in 2014. Its appearance in the National Curriculum is the result of activities mobilized by actors and organizations from across the public, private and third sectors to promote 'learning to code' in schools. This paper reports on a policy analysis of these activities, addressing two interrelated research questions:

1. What policy actors, organizations, and activities are involved in the current emergence of learning to code in the new Computing curriculum?

2. What modes of educational governance are being deployed in the development of learning to code as a policy topic?

Methodologically the research has involved a form of ‘policy network analysis’ (Ball & Junemann 2012) including extensive searches for documents and materials around ‘learning to code’. These consist of published reports, pamphlets, media articles, websites, as well as social media materials such as tweets, infographics, visual media and blogs. Relationships between participating actors and organisations have been mapped, and key discursive features have been analysed. Theoretically, the research is framed by emerging accounts of governance from educational sociology, policy studies and political science, particularly utilizing the concepts of ‘policy networks’ (Ball 2012; Lawn & Grek 2012), ‘governing technologies’ (Ozga et al. 2011) and ‘digital governance’ (Margetts & Dunleavy 2013). It also considers ‘learning to code’ as a material practice of ‘algorithmic ideology’ (Mager 2012), a kind of training for ways of thinking, acting and conducting one's self in a culture understood to be mediated and governed by ‘algorithmic power’ (Beer 2013).

The research has traced the emergence of ‘learning to code’ in materials from organizations such as Nesta and the Royal Society, and tracked its development through the ‘Computing at School’ community, the after-school ‘Code Club’ initiative in primary schools, and the ‘Make Things Do Stuff’ campaign led by Nesta and the Nomimet Trust, as well as a wider global proliferation of events, projects and activities including ‘Codecademy’ and the ‘Hour of Code’ campaign promoted by many major US computing corporations.

These activities are evidence of how educational governance now involves private and third sector participants linked together in cross-sectoral and globalizing policy networks. By promoting 'learning to code', these networks are inculcating learners into the ideological practices and modes of conduct of an increasingly code-governed and algorithmically-powered present.