

116 Reimagining Research Excellence in Doctoral Education: Connecting Communities with Doctoral Research Agendas

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Research Domains

Postgraduate scholarship and practice (PGSP)

Abstract

This paper explores emerging work on civic and community-informed models of doctoral education. Drawing on literature relating to modes of knowledge production (Liyanage et al., 2022; Miller et al. 2018; Peris-Ortiz 2016), we consider how discourses around research excellence and inclusion in doctoral education may be reimagined in this context. In this paper, we offer a tentative conceptual model for civic practice in doctoral education which we review through three recent initiatives that have aimed to connect doctoral communities to civic challenges, and engage citizens and employers with doctoral education. These include programmes seeking to legitimise broader conceptions of scholarship within the core of doctoral education through public scholar initiatives (Porter, 2021), expanding the core sets of values on which doctoral education are founded (Chiappa and Cantini, 2022), and place-based partnerships engaging civic partners in shaping doctoral research agendas (Smith-McGloin, 2022; Handforth, 2023).

Full paper

Universities have a long history of civic engagement; primarily in relation to undergraduate curricula (McCunney, 2017) in areas such as service learning, volunteering, and policy discussions. Relevant literature has used theoretical lenses including Social Cognitive Theory to describe modes of agency (Bandura, 1977), Critical Pedagogy (Freire), and Transformative Learning Theory (Mezirow, 1991). In policy terms, discourses relating to civic engagement have centred on universities' third mission (Petersen, Kruss and van Rheede, 2022) engaging with sociological lenses such as institutional theory, network analysis and cultural sociology.

Simultaneously, whilst the notion of 'excellence' has become an increasingly significant driver within the research ecosystem in recent years (OECD, 2014), linked to the need to justify the investment of public money in research and increasing competition for scarce resources (Münch, 2014), policy-makers have begun to centre equity as critical to achieving excellence in UK research and innovation (PGR New Deal, UKRI EDI Strategy).

Work on civic and community-informed practice has been slow to emerge at doctoral level. Existing literature on doctoral education and wider engagement with communities focuses predominantly on praxis in the context of industrial and professional doctorates (see Boud et al., 2021; Terzioğlu, 2011; Wildy, Peden and Chan, 2015). Doctoral education is largely still conceptualised as an instrumentalist tool of neoliberal higher education; producing highly-skilled postgraduate researchers and knowledge for the economy. For example, professional doctorates are framed as an effective conduit within the triple helix model of the knowledge economy.

Professional doctorates are specifically viewed as a mechanism by which the university can realise its potential, through close interaction with industry and government, to deliver innovation and economic development in a Knowledge Society. Lee, Green and Brennan (2000) and Gallagher (2000) both view positively the professional doctorate's connection with practice; closer integration between university and professions; encouragement of university-industry partnerships; and opening up of the process of knowledge production within the knowledge economy. The knowledge created within a professional doctorate is generally conceptualised as Mode 2 knowledge, following Gibbons et al. (1994); 'produced in (the) context of application; transdisciplinary; heterogeneous; [...] socially accountable and reflexive, including a wider and more temporary and heterogeneous set of practitioners, collaborating on problems defined in specific and localised context' (Lee, Green and Brennan 2000, p.124).

The modern 'networked' university is shifting to Mode 3 knowledge production, by adding a fourth element of wider public (culture, media, values, technology, creative industries) to the university-industry-government relations 'triple

helix' described by Etzkowitz and Leydesdorff (2000). This quadruple helix (Miller et al. 2018; Peris-Ortiz 2016) speaks to university social responsibilities and a developing capacity through virtual and other means to democratise knowledge and knowledge production by working with publics who can engage with ever-growing knowledge and super-complexity (Barnett, 2000). Liyanage and Netswera (2022) summarise thus:

Mode 1 is not adequate to solve social problems. As a result, Mode 2 and Mode 3 have evolved combining scientific knowledge and social contexts. It is a reflexive knowledge production system with reverse communication. Namely, science speaks to society, and society speaks back to science. (3)

In this paper we explore conceptually how doctoral education might use the nodes and networks described in Mode 3 knowledge production – often situated in a global context – to engage civic society in a hyper-local way. We consider how members of local communities can be engaged with doctoral research as co-creators of research agendas, research end-users, consumers of research outputs and as researchers themselves. Building on Deem's work (2020) on doctoral education for the public good, we consider how new models of doctoral programmes which connect with communities have the potential to: improve public engagement with research that is currently patchy, despite high-level policy initiatives attempting to embed the 'civic' focus of universities across the sector (Harrow and Guest, 2021); ensure better research questions and the inclusion of 'undone science' projects (Hess, 2007) with local impact; address issues of diversity in research communities by engaging with a wider variety of applicants to undertake research projects with local resonance.

We offer a tentative conceptual model for civic practice in doctoral education which we review through three recent initiatives that have aimed to connect doctoral communities to civic challenges, and engage citizens and employers with doctoral education. These include programmes seeking to legitimise broader conceptions of scholarship within doctoral education through public scholar initiatives (Porter, 2021), expanding the core sets of values on which doctoral education are founded (Chiappa and Cantini, 2022), and place-based partnerships engaging civic partners in shaping doctoral research agendas (Smith-McGloin, 2022; Handforth, 2023).

References

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.

Barnett, R. (2000). University knowledge in an age of supercomplexity. *Higher education*, 40, 409-422.

Boud, D., Costley, C., Marshall, S., & Sutton, B. (2021). Impacts of a professional practice doctorate: a collaborative enquiry. *Higher Education Research & Development*, 40(3), 431-445.

Chiappa, R., Cantini, D., Karakasoglu, Y., Manathunga, C., Peters, C., Scholz, B., & Yasar, B. (2022). Social, ethical and cultural responsibility as core values for doctoral researchers in the 21st century. In *Towards a Global Core Value System in Doctoral Education* (pp. 201-240). UCL Press.

Deem, R. (2020). Rethinking doctoral education: University purposes, academic cultures, mental health and the public good. *Structural and institutional transformations in doctoral education: Social, political and student expectations*, 13-42.

Etzkowitz, H., & Leydesdorff, L. (2000). The dynamics of innovation: from National Systems and "Mode 2" to a Triple Helix of university–industry–government relations. *Research policy*, 29(2), 109-123.

Gallagher, M. (2000, December). New directions in Australian research and research training policy: some questions for researchers. In *Annual Conference for the Australian Network for Higher Education Policy Research*, Australian National University, Canberra (pp. 7-8).

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P. & Trow, M. (1994) *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies*, SAGE, London.

Handforth, R. (2023, April 25) "A new model for doctoral training informed by the community". Web blog post, WonkHE.

Harrow, J., & Guest, M. (2021). New development: Institutions, 'new civic leadership' and being 'truly civic'—some tensions in co-production debates. *Public Money & Management*, 41(5), 417-421.

Hess, D. (2007) *Alternative Pathways in Science and Industry. Activism, Innovation, and the Environment in an Era of Globalization*. Cambridge, Massachusetts: The MIT Press

Lee, A., Green, B., & Brennan, M. (2000). Organisational knowledge, professional practice and the professional doctorate at work. *Research and knowledge at work: Perspectives, case studies and innovative strategies*, 117-36.

Liyanage, S. I. H., Netswera, F., Meyer, J., & Botha, C. (2022). Four Pillars of the Green University Soft Infrastructure: Towards a Non-Linear Model of Innovation. *International Journal of Knowledge Management (IJKM)*, 18(1), 1-16.

Mezirow, J. (1997). Transformative learning: Theory to practice. *New directions for adult and continuing education*, 1997(74), 5-12.

McCunney, W. D. (2017). *Shaped by campus culture: Intersections between transformative learning, civic engagement, and institutional mission*.

Miller, K., McAdam, R., & McAdam, M. (2018). A systematic literature review of university technology transfer from a quadruple helix perspective: toward a research agenda. *R&D Management*, 48(1), 7-24.

Münch, R. (2014). *Academic capitalism: Universities in the global struggle for excellence*. Routledge.

OECD (2014). *Promoting Research Excellence: New Approaches to Research Funding*, OECD Publishing

Peris-Ortiz, M., Ferreira, J. J., Farinha, L., & Fernandes, N. O. (2016). Introduction to multiple helix ecosystems for sustainable competitiveness (pp. 1-13). Springer International Publishing.

Petersen, I. H., Kruss, G., & van Rheede, N. (2022). Strengthening the university third mission through building community capabilities alongside university capabilities. *Science and Public Policy*, 49(6), 890-904.

Porter, S. (2021). Doctoral reform for the 21st century. In *The Future of Doctoral Research* (pp. 28-39). Routledge.

Terzioglu, F. (2011). Leadership competence educational model for a twenty-first century nursing doctoral education in contemporary Turkey. *International Journal of Leadership in Education*, 14(4), 443-455.

Smith-McGloin, R. (2022, August 9) "Co(l)laboratory: Linking Research to Our Place". Web blog post Universities for Nottingham.

Wildy, H., Peden, S., & Chan, K. (2015). The rise of professional doctorates: case studies of the Doctorate in Education in China, Iceland and Australia. *Studies in Higher Education*, 40(5), 761-774.