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Developing a Computer Science Education Community of Practice for Early-Career Academics in the UK

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ABSTRACT

The early career of a computer science (CS) academic in the UK is increasingly challenging in terms of balancing research aspirations, learning and teaching responsibilities, wider academic service commitments, alongside their own professional development. The quality of development for an early-career CS academic is mediated in part by the strength of the community of practice they are able to access and engage with. And not just ones that operate within their department or institution; but also communities of practice that exist at a national and international level, often through professional bodies, learned societies and research networks. This poster presents the emerging work-in-progress to address some of these social, cultural and structural challenges in developing a CS education community of practice in the UK. Building on recent work, we identify a number of specific actions and recommendations to supplement the current formal institutional requirements with enhanced national-level academic practice support and professional development, alongside local and regional professional mentoring.

CCS CONCEPTS

• **Social and professional topics** → **Professional topics**.

KEYWORDS

Early-career academics, community of practice, professional development, computer science education, UK

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This poster presents the ongoing work-in-progress to develop a CS education community of practice for early-career academics in the UK, aiming to address some of the key social, cultural and structural challenges [4, 6]. It reports progress from recent work [2, 5] exploring, developing and delivering an initiative to supplement institution-based professional development and training available to early-career CS academics, with an offering of regional and national activities. We outline the work undertaken to date to research, co-design and develop training courses for those new to teaching CS in the UK, especially in the context of substantial changes to school-level curricula and qualifications across the UK [1].

A number of key themes have been identified: inconsistent institutional support for early-career academics; balancing competing academic priorities and resource constraints; changing negative perceptions of developing CS education practice; bridging islands of CS education excellence in the UK; linking with professional bodies; and the importance of developing a sustainable UK-wide community. Two virtual events have taken place in early 2021 with representative groups of early-career academics, to further explore the key characteristics and operating model for this community of practice. Looking ahead into 2021 and beyond, there is a significant opportunity to develop a national training programme to augment institutional professional development opportunities; alongside a national mentoring programme supplemented by local and regional networks. We also reflect on the challenges and opportunities for this community as we see the ongoing impact from COVID-19 [3].

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