

System Dynamic Modelling to Keep More Children Safely at Home and Reduce Unnecessary Children being Taken into Care

Dr Tim Hobbs (Director, Dartington Service Design Lab)

Vicky Baker (System Design Specialist, Dartington Service Design Lab)

Shreya Sonthalia (Modelling Specialist, Dartington Service Design Lab)

Child welfare systems in the UK are facing unprecedented challenges, with a rising demand for services set against a backdrop of severe budget constraints. Most local jurisdictions will have experienced a 40% reduction in their overall allocated expenditure by 2020, combined with an increase in placement costs for children taken into care. The Dartington Service Design Lab will share their experience of working with three local authorities in England to understand and model the dynamics of these systems in order to help develop and explore strategies to help local authorities keep more children safely at home and in doing so reduce the costs of the child social system. We will share our approach to participatory group model building and some preliminary system dynamic models that have been created and associated learning and insights.

Tim Hobbs, PhD has spent over a decade working with numerous public systems, charities and foundations to help shape a series of bold investments and experiments designed to improve child outcomes. He is passionate about fusing science-based and user-centred design approaches to system reform and service design. Tim joined the Dartington Social Research Unit as a researcher in 2004, later becoming Head of Data and Analytics. He was appointed as the first Director of the Dartington Service Design Lab in April 2017. He holds a first-class BSc in Psychology and Criminology and a PhD in Social and Policy Sciences. Alongside Nick Axford, Tim is a recipient of the Kammerman and Khan Award from the International Society of Child Indicators. He is a 2016 Clore Social Fellow.

Vicky Baker, MSc works in partnership with health and social care systems to change the way they manage the structure and dynamics of their systems. Her work involves the facilitation of group strategy development sessions, the co-creation of system dynamics models, and the design and refinement of processes and practice. In addition to her interest in systems work, Vicky is currently undertaking research into adolescent-to-parent abuse for a PhD at the University of Central Lancashire. Vicky joined the Dartington Social Research Unit in 2012 as a researcher, after completing a Masters in Psychology of Education with Distinction at the Institute of Education, UCL. She subsequently worked in an associate capacity before taking up the position of System Design Specialist in the Lab in April 2017.

Shreya Sonthalia, MSc develops models that help understand the dynamics of public systems and predict the effect of different system reform strategies. Shreya is committed to influencing policy and practice through research and data analysis. She joined the Dartington Social Research Unit in 2014 as a researcher, working on various reviews of evidence and cost-benefit analysis of evidence-based programmes. She also helped manage a feasibility study and pilot randomised controlled trial of a dating violence prevention programme, bringing together users and evidence. In April 2017 she took up the position of Modelling Specialist at the Dartington Service Design Lab, where she works on building system dynamics simulation models of complex public systems and contributes to wider analytical work of the Lab.