

Network mapping visualisations

Alison Fox, Diana Tremayne and Marc Sarazin

In this session you will hear advice from three academics who have used network mapping visualisations in different ways. Each will explain the methods they used, illustrate them with some of the outputs, and share their recommendations about what to think about should you be interested in using similar approaches.

Firstly, Alison will share her work in using network mapping as part of an interview strategy with a wide range of education professionals, most recently focused on the support networks of beginning teachers. Whilst this work has mostly used mapping which has been analysed qualitatively, as this work is being scaled up, a way of drawing the maps which can be quantified is being currently piloted. Alison will explain the methods used and talk about the advantages and disadvantages of both approaches to creating the maps.

Secondly, Diana will share how she gathered data, including network visualisations, from a Twitter 'chat' aimed at further education teachers. She will demonstrate how the data was collected using a relatively simple online tool. This data aimed to provide an 'outside' view of the network which would complement data from participant observation and interviews and she will consider how the different methods work together in a primarily qualitative study.

Thirdly, Marc will present some ways to use visualisations to analyse and interpret the structure of networks. Drawing on two studies, one of a school for children with schooling difficulties and the other of teacher mobility across schools, Marc will show how visualisations can enable analyses that are both holistic and detailed, as well as complementary to more traditional analyses. He will demonstrate how different visualization methods can illuminate different aspects of the same network, and how network maps can be fed back to research participants to gain further insights into the social dynamics behind networks.

Dr Alison Fox is a Senior Lecturer at the Faculty of Wellbeing, Education and Language Studies at the Open University, UK. After training as a secondary school science teacher, Alison moved into initial teacher training and research about and for the support of beginning teachers, including their emergent development as school leaders. Over the last 15 years she has been involved in Teaching and Learning Research Programme, Department for Education and National College for Teaching and Leadership funded projects related to teachers' professional development and supports practitioner enquiry through her Masters and Doctoral supervision.

Marc Sarazin is a Postdoctoral Research Fellow at the University of Louvain (UCLouvain, Belgium), working on the ERC-funded TeachersCareers project. He completed his DPhil (PhD) in Education at Oxford University's Department of Education in December 2018. Marc's research focuses on educational environments and how they affect people. In his PhD, he combined ethnographic fieldwork and quantitative social network analysis (SNA) to investigate how educational practices and music programmes shape school environments, as well as the social positions of students with

schooling difficulties. His more recent scholarship uses SNA and semi-structured interviews to research teachers' career decisions, including mobility and dropout.

Diana Tremayne is currently a full-time PhD researcher at Leeds Beckett University. Her research looks at how online teacher-learning communities support teachers' professional development. The main focus of her research is on a further-education based Twitter community, and she is using a netnographic approach for the project. After training as a modern languages teacher, Diana worked in schools and universities, and then moved into teaching ESOL in further education; she is still involved with a number of ESOL projects. She has also worked as an advanced learning practitioner, and has written for the *Times Educational Supplement*. Her email address is d.tremayne@leedsbeckett.ac.uk, and she tweets at [@dianatremayne](https://twitter.com/dianatremayne).