

Guest Editorial

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According to Plato, “The beginning is the most important part of the work.” Beginning the *Journal of Technology, Engineering and the Environment* is an “important part of the work” of the Faculty of Technology, Engineering and the Environment at Birmingham City University, showcasing new research by staff and students. The beginning of the journal also coincides with the beginning of new research strategies for the University and Faculty, which aim to consolidate research in areas of research excellence that are relevant to challenges faced by UK and global society. More than ever before, it is becoming necessary to work across disciplinary boundaries to address such complex and dynamic challenges.

The articles in this inaugural issue, all drawing on recent work by students, demonstrate the range of disciplines and approaches to research being taken across the Faculty. They range from the development of protocols to support audio-visual communication across the Internet and the design of a mobile business intelligence software application, to sustainable procurement in the construction industry and ways of designing more efficient canal locks. These articles use a range of methods, which draw on disparate disciplinary traditions and theoretical frameworks. What unites them is their focus on applying research to real-world challenges; attempting to make the world a better place rather than just generating knowledge for the sake of it, to sit on library shelves gathering dust. This is borne of an organisational culture at Birmingham City University, which seeks to value research and practice equally, and seeks societal impact as much as it does research excellence.

Whether our research is monodisciplinary or interdisciplinary, generating knowledge for impact is all about relationships. The knowledge that each of us hold is influenced by relationships. Even if much of our knowledge has come from books or the Internet, what we choose to learn about and trust as reliable is influenced by the society and culture in which we learn. Whether we like to admit it or not, we often find it easier to accept things we are told on the basis of how much we trust the person from whom we hear them. It is often easier to do this than to critically interrogate the evidence behind every claim we hear.

This presents researchers with a number of challenges. To gain and retain the trust of people who might use the findings of our research, we have to be sure of the evidence we are presenting, communicate any uncertainty associated with it, and be clear about the limits of our knowledge. Often this may require us to act as a “knowledge broker”, passing people onto colleagues who are better placed to provide them with the evidence they need, or accessing and communicating evidence published by others. Building trust takes time and patience, and requires humility and empathy. We must be prepared to learn from those who might use our research, and be prepared to adapt our research and our communications accordingly.

It is therefore crucial that each of the papers in this issue has been developed with and/or for the people who are most likely to use the research findings. For example, Power and Pendry's work with the Canal and River Trust was co-conceived through dialogue with the Trust, who have to find ways of reducing the cost of running and maintaining locks if they are to become self-sufficient and enable more public access to canals. In the case of the article by Jones, he is actually employed by a construction company interested in exploring sustainable procurement. It is these long-term relationships, built on trust, which deliver research that is relevant, has resonance and brings about real and lasting change.

Research in the Faculty of Technology, Engineering and the Environment is both applied and diverse, ranging from knowledge-based engineering of jet engines to real estate management. This will make for stimulating reading as future issues of the *Journal of Technology*, *Engineering and the Environment* showcase more of the research being conducted by staff and students. Returning to Plato, with this inaugural issue, "beginning is the most important part of the work."