Editorial

It is sometime since I last wrote an editorial for Management and Education and I would like to thank Linda Hammersley-Fletcher for the opportunity to reconnect with an 'old friend'. This is especially so as the topic of this special edition — sustainability — is close to my heart. I have taken the opportunity afforded me as guest editor to bring together a group of contributors who would normally be heard through other channels, but who have something to say on the leadership and management of education for sustainability.

Sustainability is, in terms defined by Rittel and Webber, a 'wicked' problem. These problems are characterised through their complexity and dynamism, their resistance to resolution due to incomplete, contradictory and changing requirements that are often difficult to recognize. In order to tackle such problems we need to operate with different models, ones based on systems thinking and nonlinear operations more able to deal with these complexities.

Mike Bottery (no stranger to the pages of MiE) begins this special edition by addressing the problematic nature of the word 'sustainability'. Talking specifically about the challenges that leadership face at an institutional level, he points out that many of these challenges are posed by larger social, economic and environmental systems. This ability to maintain a focus on the 'local' and the 'global' is key to developing sustainable systems.

The problematic nature of sustainability is widely acknowledged and many of the contributors to this edition forefront this in their arguments. However, we do have to have points of engagement, even with the 'wickedest' of problems. Caprani draws upon the Brundtland Commission definition in her article – namely that "sustainability or sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs." She goes on to discuss two frameworks that have been used to drive sustainable development in the 21st Century; the so-called Millennium Development Goals and the recently adopted UN Sustainable Development Goals. Caprani points out the important difference that, whilst the MDG tended to frame aid spending, the SDG are universal - they count at home as well as abroad. All member states have endorsed these goals and must apply them in their own country.

It is still early days in the life of the Sustainable Development Goals, but it is worth examining the way in which issues around education for sustainability are being handled within the context of the UK. This exploration is carried out by the remaining articles in this edition. Warwick uses a case study of Plymouth University to examine the leadership of education for sustainability within an institution of higher education. In doing so he raises the issue of student voice and the role of students as change agents. He also focuses specifically on the key role students can play as internal catalysts for change. This approach, the paper argues, has significant implications for both staff training and the design of learning spaces and experiences.

The importance of staff training and teacher education is also explored through Bamber et al's article which offers a comparative review of teacher education relating to Education for Sustainable Development across the UK home nations. This paper highlights the complexity of this area and the way in which policy and accountability frameworks impact on practice. Such a comparative approach allows an appreciation that there are other ways of working, even if the differences are often subtle, emerging as choices around curriculum and pedagogy.

Bourn discusses a specific attempt to actively engage children and young people with global issues. This discussion is based on the evaluation of the Global Learning Programme, a government sponsored initiative which has operated in England since 2010. Whilst the policy environment might

impact on the programme's consolidation, findings suggest that the 'whole school' approach that is a feature of this programme has some value in ensuring key goals relating to social justice and concern for the environment for part of a child's learning.

Carr explores the role of school leadership in addressing the 'wicked' problems around sustainability, acknowledging that formal educational spaces are constructed around models that are unsustainable in themselves, often drawing on paradigms of neoliberalism, consumption and hierarchical power relations.

Within this special edition we have focused on the role of formal educational institutions and their leaders in securing a sustainable future and the challenges that this poses. As Caprani points out as we move forward it will be necessary to find innovative ways for the public, private and voluntary sectors to work in partnership to ensure that the sustainable development goals are achieved. The final article explores the leadership challenges of one such initiative, the Regional Centres for Expertise (RCEs) in Education for Sustainable Development. These are networks, supported by the United Nations University Institute of Advanced Studies, which connect local stakeholders into a global community. Thus the aphorism 'think globally, act locally' is made manifest through these RCEs.

It might be that 'wicked' problems are resistant to solution because their complexity closes down our willingness to act. In order to be more able to deal with the seeming chaos of these problems there is a clear need to develop the ability to understand the interconnections within and between systems; to work within metaphors that derive from biological systems rather than mechanical ones. This has profound implications for the ways in which we will operate – this edition of MiE is a contribution to the discussion around these changes.