

## Symposia Abstract Book - Main Abstract Book with Submissions and Programme (All Symposia)

Wicked problems - a higher education perspective ( 0195 )

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**Rationale Text:** Society faces many ‘wicked’ problems, including poverty, food security, access to health-care, energy supply and the climate emergency. The concept of ‘wickedness’ originates from the work of Rittel and Webber (1973). They argued that scientific or instrumentalist, approaches had effectively dealt with ‘tame’ problems, which were relatively easy for governments and policymakers to grapple with. However, a variety of more complex and difficult issues remained unsolved and were termed ‘wicked problems’. These problems arise through a complex set of social, environmental and economic processes which are closely interrelated (Peters & Tarpey, 2019). The key features of wicked problems are: i) they are difficult to define and are linked to other problems; ii) solutions are difficult to find and are linked to those that cause the problem; and iii) it appears impossible to know what a good solution might be (Peters & Tarpey, 2019). Wicked problems are those with high levels of complexity and uncertainty, bringing stakeholders into contact with competing value positions and contrasting world views (Veltman, Van Keulen and Voogt, 2019). Our proposed symposium brings together three papers that explore this topic in higher education today. Two are based in the UK and one in the US. One of the few certainties is that young people of today will be engaged with addressing processes that cause wicked problems and efforts to mitigate them, for the foreseeable future. Therefore, education systems have an important role to play in developing appropriate skills that will enable young people to contribute meaningfully to the societal challenges of wicked problems. The wicked problems concept emerged at a time of social unrest and growing environmental consciousness and is a powerful way to frame teaching about global challenges. Our challenging times today seem to have much in common with this period in the late 1960s of rapid social change and emerging environmental consciousness. Together, the papers in this symposium put the concept of wicked problems centre stage, and how it could be used to reframe the way our students are taught, and to best equip them to face the global challenges ahead. In keeping with the spirit of the conference to be highly participative and to promote the exchange of ideas, we propose to have three papers and rather than a discussant, to have a facilitated, structured discussion with participants using Jamboard.

**Linked Submissions:**

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Academic Identities and Wicked Problems: Beyond Discipline-focused Identities? ( 0361 )

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**Research Domain:** Academic practice, work, careers and cultures (AP)

**Paper Abstract:** The extensive changes taking place in higher education have fuelled a growing literature on the shifting identities of academics as they negotiate related transitions and tensions (Barrow, Grant and Xu, 2021; Hodgson and Watts, 2021). There has also been considerable interest in education that prepares students for working with wicked problems – or global challenges. It is therefore important to understand and enable academics who are willing to take on the challenges of teaching complex interdisciplinary topics in institutions that may not be ideally set up to support them. This paper therefore explores the identities of 35 academics who were interviewed about their teaching about wicked problems. These participants often narrated identities focused around a particular wicked problem, rather than on their discipline. This seemed to bring valuable coherence to their working lives. Implications include the importance of creating institutional structures and practices that enable academics with these foci to flourish.

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Teaching (Super) Wicked Problems: Climate Change in the Higher Education Curriculum ( 0558 )

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**Research Domain:** Academic practice, work, careers and cultures (AP)

**Paper Abstract:** Climate change is a ‘super-wicked’ problem associated with challenges including food security, mass migration and biodiversity loss. Young people are increasingly expecting their university education to prepare them to address these challenges. This requires universities to go beyond scientific accounts of climate change, and to engage students in the complex interactions between social, economic and environmental systems. The research analyses if climate change is framed as a wicked problem in UK and Ireland undergraduate programmes. The first phase involved semi-structured interviews with 15 academics in subjects where climate change is commonly taught (geography and related disciplines). The second phase, which is on-going, engages academics in subjects where it is not commonly taught and professional T&L roles (25 completed to date). It highlights key principles for climate change in the curriculum. The research draws on and moves forward academic research in education for sustainability and authentic learning.

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