

24 - 26 April 2026

Madrid , Spain

## **Innovating for Sustainability: Futures Thinking in Teacher Education Across Ireland**

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### **Abstract**

This study forms part of From Theory to Practice: Empowering the Next Generation for a Sustainable Future and investigates the existing skills, knowledge, and competences of teacher educators working in Sustainability Education across Ireland and Northern Ireland. Grounded in the anticipatory competence framework, as articulated by Wiek, Withycombe and Redman (2011), the study situates Futures Thinking within its broader intellectual lineage in foresight, futures studies, systems thinking, and long term scenario analysis, traditions that have evolved from strategic planning methodologies designed to support proactive engagement with complexity. These roots are well documented in scenario planning scholarship, which traces contemporary futures approaches to foundational work in strategic foresight and emphasises the value of exploring multiple future pathways in conditions of uncertainty (Amer, Daim & Jetter, 2013). Within this framing, the research examines how teacher educators understand and apply pedagogical approaches that support students to critically and meaningfully engage with future oriented sustainability challenges (Ojala, 2017). Focusing on the second of four interconnected project strands, Teaching and Pedagogical Innovation, the study explores the extent to which such innovative methodologies, particularly Futures Thinking, are embedded within teacher education provision across both jurisdictions.

A qualitative research design was employed, beginning with a baseline survey that revealed significant gaps in teacher educators' knowledge and training in sustainability pedagogies. To deepen and triangulate these findings, semi structured interviews were deployed with teacher educators (n = 32) across Ireland and Northern Ireland. A third phase of research involved two online focus groups (n = 5 and n = 6). Findings indicate that Futures Thinking holds considerable potential for fostering critical thinking and enhancing awareness of sustainability related challenges among learners. However, the study also highlights a marked lack of structured professional development opportunities and limited integration of Futures Thinking within teacher education programmes and curricula North and South.

A key contribution of this research lies in its all island, cross jurisdictional approach, offering a rare comparative perspective on sustainability competences within teacher education in Ireland and Northern Ireland. This provides new insights into how shared cultural contexts but differing policy landscapes shape the preparedness of teacher educators to adopt future focused pedagogies.

Overall, the study underscores the need for strengthened professional learning pathways and systemic support to enable teacher educators to embed Futures Thinking as a core pedagogical approach within Sustainability Education. The implications of these findings point to the value of coordinated all island professional development initiatives, greater policy alignment around sustainability competences, and the creation of shared communities of practice (Wenger, 1998) to build collective capacity. Such collaborative, future oriented approaches would contribute to a more coherent and resilient teacher education landscape, better equipped to prepare learners for the complexities and uncertainties of a rapidly changing world (Hussein, 2025).

## References

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**Keywords:** Futures Thinking Sustainability Education Teacher Education Professional Development