

Attending to Care in Responsible and Innovative Design: An Immersive Pedagogical Approach for Higher Education



Mary Nolan, B.Eng, M.Eng.Des, CEng

Part time PhD Candidate, UCD SMARTlab / Inclusive Design Research Centre of Ireland

Academic Developer, Teaching & Learning Centre, Atlantic Technological University

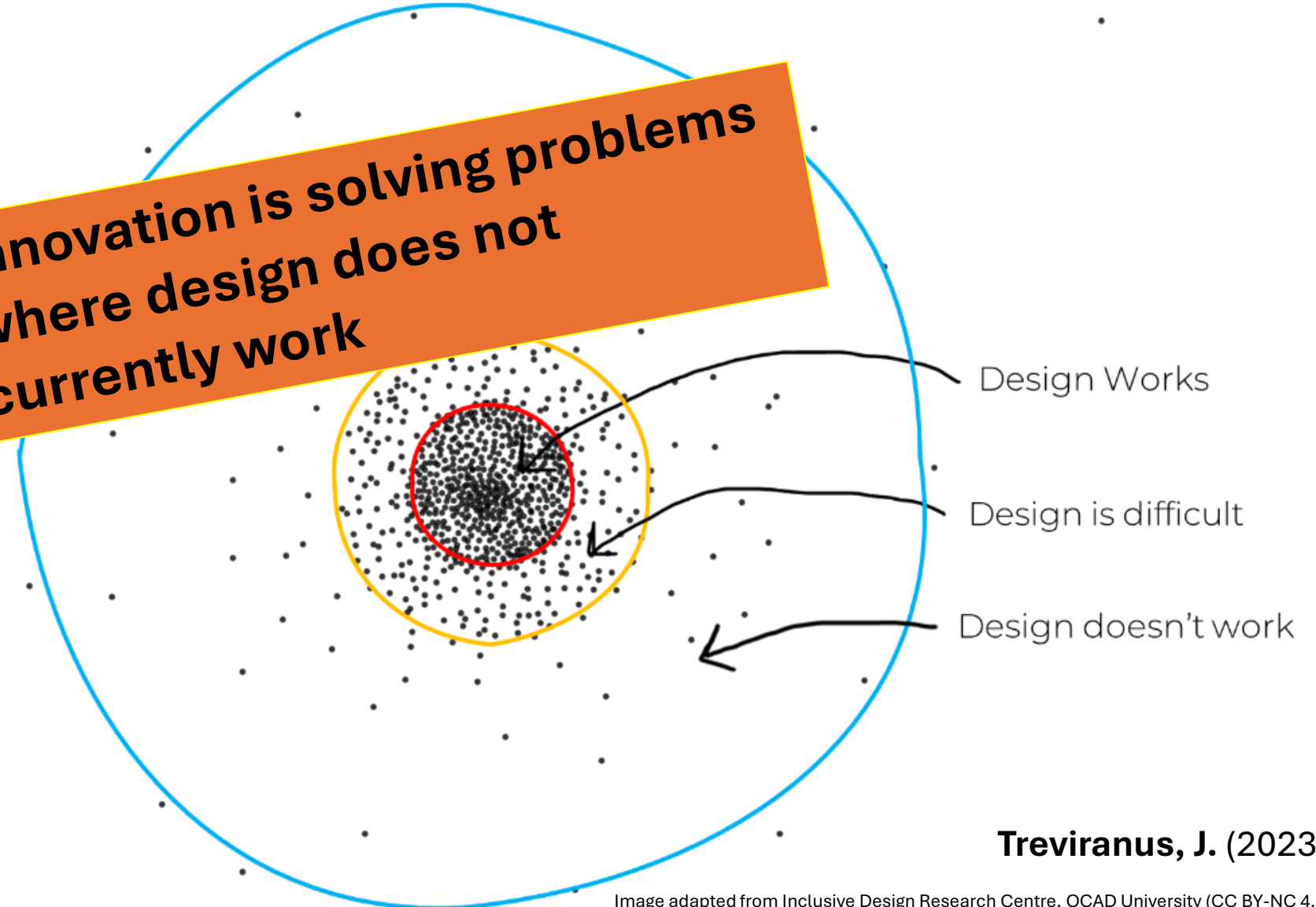
Lecturer, Faculty of Engineering & Design, Atlantic Technological University, Sligo



Engineering in Everyday Life



**Innovation is solving problems
where design does not
currently work**

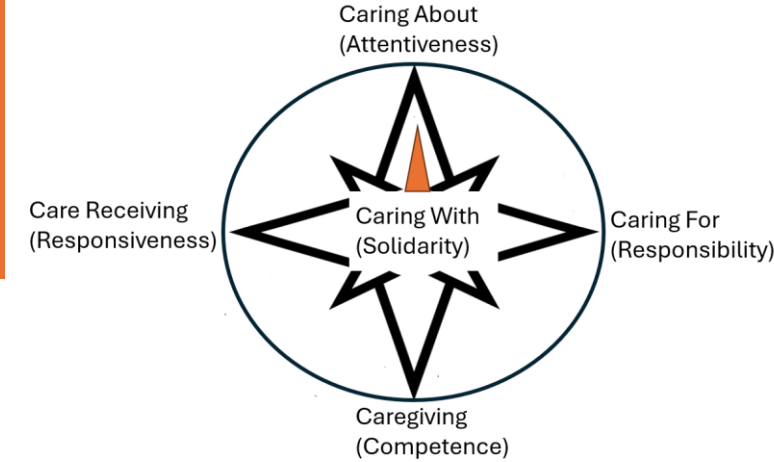


Treviranus, J. (2023)

Ethics of Care-Informed Pedagogical Intervention

Time	Activity	Purpose
0–5 min	Introduction and framing	Briefly introduce ethics of care and outline the workshop purpose and structure
5–20 min	Intervention 1: Personal attunement activity	Engage participants with their own lived or professional experiences to surface immediate contexts of care, responsibility, and inclusion
20–35 min	Intervention 2: Relational narrative case	Introduce a lived experience beyond participants' own context, focusing on relational, societal, and systemic dimensions
35–50 min	Structured reflection (individual and small group)	Support comparison of both interventions and deepen reflection on responsibility, inclusion, and power
50–60 min	Group synthesis and application	Share key insights and identify opportunities to apply care-informed pedagogies in participants' own contexts

Reflective Dimensions Informed by Tronto's Ethics of Care



Attunement

Caring About (Attentiveness)

- Noticing needs, exclusion, vulnerability, and lived consequences.

Relational Understanding

Care For (Responsibility), Caregiving (Competence), Caring With (Solidarity)

- Understanding systems, relationships, power, and shared responsibility.

Critical Reflexivity

Care Receiving & Caring With (Solidarity)

- Questioning assumptions, privilege, unintended consequences, and one's role.

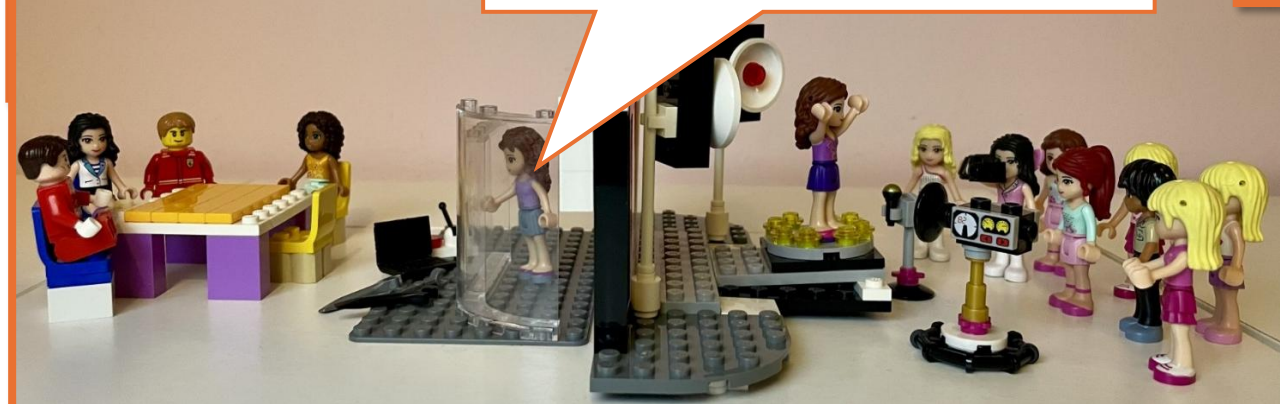
“I know I am sometimes proud and wouldn’t admit that I need help. This workshop so far taught me that dependency is normal and not a failure.”

“The table symbolises collaboration and participation while the empty seat represents how I feel like I don’t have a place within the system.”



“Those who design these systems shape whether support is available.”

The students initially located these struggles within the individual, but later recognised how wider systems shape dependency, access, and support.



The systems we build matter. So do the stories we tell about them.

Innovation is not only about efficiency; it is about dignity, belonging, and interdependence.