



Unleashing the power of the interdisciplinary in disaster risk reduction: reflections from an early career researcher group developing a risk-informed decision support environment for Tomorrow's Cities

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The concept of disaster risk is multidisciplinary by nature. Responding to disasters and increasingly preventing new and reducing existing disaster risk has become the backbone of various disciplines. Yet, moving from various disciplinary perspectives to integrated approaches remains a fundamental challenge. This talk reflects on the experience of a group of early-career researchers, including physical scientists, engineers and social scientists from different organisations and countries, who came together to lead the refinement, operationalisation and testing of a risk-informed decision support environment (DSE) for Tomorrow's Cities. Drawing on the notion of “boundary objects” and reflexive elicitation, members of the group explored enabling and hindering factors to interdisciplinary research across four case studies that unfolded between July-December 2021, namely: operationalisation process of the DSE; development of a testbed as a demonstration case for the implementation of the DSE; consolidation of frequently asked questions about the DSE; and elaboration of a multi-media communication tool for outreach to various audiences. The study argues that enablers of interdisciplinarity can be synthesised across a range of factors, including exogenous, governing, learning and attitudinal, and that diversity of boundary objects as convening spaces for disciplinary interaction can propel integration. It is further suggested that a similar rationale can be applied when moving towards co-producing knowledge with non-academic actors in a transdisciplinary manner. Strengthening the interdisciplinary capacities of early career researchers across disciplines and geographies is a fundamental step and promising pathway towards transformation.