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Cambridge Elements

Elements in Creativity and Imagination edited by Anna Abraham University of Georgia, USA

DESIGN THINKING AND OTHER APPROACHES

How Different Disciplines See, Think and Act

> Nathan Crilly University of Cambridge





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How Different Disciplines See, Think and Act

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Abstract: Efforts to promote creativity often centre on encouraging people to engage in 'design thinking', 'systems thinking' and 'entrepreneurial thinking'. These different approaches are most often defined, taught and applied in mutual isolation, which has obscured what distinguishes them from each other, what they have in common and how they might be combined. These three approaches are also most often described in isolation from the approaches that characterise other disciplines, all of which are relevant to how problems are identified, framed and solved. These other approaches include 'computational thinking', 'engineering thinking', 'scientific thinking', 'evolutionary thinking', 'mathematical thinking', 'statistical thinking', 'geographical thinking', 'historical thinking', 'anthropological thinking' and many more. Examining these approaches as a set allows each of them to be better understood, and also reveals the connections and contrasts between them. Such comparisons provide the foundation for a more coordinated project to represent how different disciplinary approaches contribute to creative work.

Keywords: design thinking, systems thinking, entrepreneurial thinking, computational thinking, mathematical thinking

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