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Costello, Gabriel J.

The Teaching of Design and Innovation

Principles and Practices

- Offers a practical process for implementing the pedagogy in academic institutions
- Examines the teaching of Design and Innovation in a holistic manner
- Provides an accessible presentation of underlying principles to Design and Innovation education
- Describes the challenges associated with the teaching of Design and Innovation using real life academia-industry case studies
- Conceptualises the 360 degree development of Design and Innovation from the “Potter” to the “3D Printer”

This book is about design and innovation – what it is and how to teach it. The blending of design and innovation is having an increasing impact not only on the world of products and services but on a wide variety of disciplines such as information and communications technology (ICT), business, education and medicine. However, there is a lack of books on teaching the subject despite the significant growth of interest in both academia and the workplace. This book addresses this gap by outlining foundational principles for the teaching of design and innovation and by offering a practical process for implementing the pedagogy in academic institutions and outside academia in the context of continuing professional development (CPD). It describes two undergraduate case-studies that aimed to instill design and innovation competences in students of both engineering and business disciplines. The cases involved student teams working with incubation centre start-ups and multi-national subsidiaries. One of the aims of this book is to provide a resource for continuing professional development (CPD). Consequently, a third practitioner-based case study is presented as an example of research-informed teaching. In addition, the book proposes the concept of Simulation-Action Learning (SAL) as an enhancement of Project-Based Learning (PBL).

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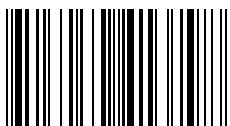
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