Transdisciplinarity and Design: Comparative Review and Synthesis for the Design Process

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Abstract

Transdisciplinarity gained importance in the 1970s, with the initial signs of weakness of both multi- and interdisciplinary approaches. This weakness was felt due to the increased complexity in the social and technological landscapes. Generally, discussion over the transdisciplinary topic is centred in social and health sciences. Therefore, the major challenge in this research is to adapt design research to the emerging transdisciplinary discussion. Based on a comparative and critical review of several engineering and design models for the design process, we advocate the importance of collaboration and conceptualisation for these disciplines. Therefore, a transdisciplinary and conceptual cooperation between engineering and industrial design disciplines is considered as decisive to create breakthroughs. Furthermore, a synthesis is proposed, in order to foster the cooperation between engineering and industrial design.

Keywords

Design process; transdisciplinarity; industrial design; engineering

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