

Chapter 1

Sharing the Load: Developing Capacity for Social Sustainability in Design through Collaboration

Muireann McMahon
University of Limerick, Ireland

Tracy Bhamra
Loughborough University, UK

ABSTRACT

Today there is an impetus on professional designers to practice in a responsible and ‘sustainable’ manner, with equal emphasis on society, economy and environment (Fletcher & Dewberry, 2002). This is an enormous challenge as the competencies needed to develop these types of holistic solutions are extremely complex. This chapter describes a Pedagogical Innovation in the discipline of Product Design regarding the important role international collaborative projects can play in introducing these competencies into design practice. Iterative cycles of Action Research describe three such projects. A brief over-view of the project logistics is followed by an analysis of the participant experiences. The findings show that building capacity for sustainable design, through collaboration, is not a simple or ‘one size fits all’ approach. The research learning advises on how future projects should be structured and delivered and how the competencies acquired could bring about a change in designers behaviours towards a more sustainable future.

DOI: 10.4018/978-1-4666-5856-1.ch001

BACKGROUND

The paradigm of design is changing. Designers now need to be equipped with the skills and knowledge that will enable them to participate in the global move towards a sustainable future. The tenets of Sustainable Development [SD] and Design: economy and environment are being dealt with extensively in both design practice and theory. Social sustainability in design, however, like the notion of social impacts in Sustainable Development, is a complex, contradictory and challenging area. These social elements often prove more difficult to define and implement as they deal with softer and more complex issues as diverse and unquantifiable as ethics, values, cultural diversity, holistic perspectives, as well as collective and personal responsibility.

Transforming the rhetoric surrounding sustainability into action is where designers often struggle. In order to do this effectively, this study shows that designers need to be introduced to a set of competencies that go beyond traditional design skills. To begin to address the complex issues we must first look at *what* these skills and competencies are and *how* they can be incorporated into design projects. Implementing these competencies will require a shift in how designers are taught as students and will subsequently practice as professionals. In higher education it is necessary to include projects that broaden designers' perspectives; ensure personal engagement; encourage students to develop a holistic perspective and to become critical thinkers, who question, analyse and reflexively form their own worldview (Warburton, 2003).

SETTING THE STAGE

The focus of contemporary Product/Industrial design practice is moving away from material led objects to more user-led experiences (Moritz, 2005). The notion of a designer's role as that of

merely giving shape to physical objects is no longer valid (Nelson & Stolterman, 2003). Design has evolved to become the link between human and social needs and industrial practices. This is achieved by designing tangible and intangible 'objects' that give meaning, provide cultural contexts and also the opportunities for individual expression (Hara, 2009). Design now acts as cultural stimulus, a change agent and a tool for social engagement.

Collaboration

The innovations required for sustainability may be greatly enhanced through a process of collaboration, collective knowledge sharing, multi-disciplinarity, holistic perspectives and understanding of diverse cultural backgrounds (Designophy, 2001). Encouraging and facilitating collaboration between students in an educational environment can be particularly challenging as students' struggle to move past what they know and have learnt in their own cultural settings. Individual student thinking is often rooted in past educational experiences with students getting little exposure to diversities of practice (social and professional) or failing to become engaged in any real cross cultural dialogue. Arguably, by capitalising on the process of collaboration a culture of individual and collective sharing can be encouraged leading to new knowledge and broader perspectives.

Collaborative work is of major importance; because with increasing complexity, groups of individuals can work together in order to accomplish problems they cannot solve on their own (Stempfle & Badke-Schaub, 2002). The potential of improved outcomes from collaborating experts and non-experts offers unique opportunities for designers to engage in the resolution of complex social sustainability problems (Johnson & Johnson, 1986; Davis, 2008). Multidisciplinary teamwork, though well practiced in industry is much rarer in education (Simpson, 2007). Traditional methods

24 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/sharing-the-load/103497

Related Content

Green Tourism and the Ambiguities of Sustainability Discourse: The Case of New Orleans's Lower Ninth Ward

Kevin Fox Gotham and Joshua A. Lewis (2015). *International Journal of Social Ecology and Sustainable Development* (pp. 57-73).

www.irma-international.org/article/green-tourism-and-the-ambiguities-of-sustainability-discourse/125831

"Development": Does It (Still) Matter for Global Citizenship Education? Empirical Contributions to the Conceptual Debate

Dalila P. Coelho, João Caramelo and Isabel Menezes (2021). *Teaching and Learning Practices That Promote Sustainable Development and Active Citizenship* (pp. 24-46).

www.irma-international.org/chapter/development/264653

Using ICT to Integrate Smallholder Farmers into Agricultural Value Chain: The Case of DrumNet Project in Kenya

Julius Juma Okello, Edith Ofwona-Adera, Oliver L.E. Mbatia and Ruth M. Okello (2013). *Technology, Sustainability, and Rural Development in Africa* (pp. 44-58).

www.irma-international.org/chapter/using-ict-integrate-smallholder-farmers/75585

Sustainable Analysis of Process Parameters During MIG Welding of 1018 Mild Steel

Indranil Mandal, Thia Paul, Shibam Sen, Sourav Biswas, Subhaditya Chakraborty and Sabyasachi Dey (2022). *International Journal of Social Ecology and Sustainable Development* (pp. 1-14).

www.irma-international.org/article/sustainable-analysis-process-parameters-during/293255

Comparative Study of the Impact of CO2 Emission on Income: Case Study Algeria /Morocco Between 1990-2100

M. Allali, M. Tamali and M. Rahli (2017). *International Journal of Social Ecology and Sustainable Development* (pp. 15-31).

www.irma-international.org/article/comparative-study-of-the-impact-of-co2-emission-on-income/190866