The Centre for Sustainable Design®

An Educational Framework for Future Designers.

M Williams
University of Gloucestershire, UK

Education for sustainable development (ESD) is a process that engages people and social groups through learning to live in sustainable ways (PCE, 2004). It holistically seeks to empower people of all ages to assume responsibility for creating a sustainable future (Tilbury 1995; UNESCO, 2002). This longitudinal study employs the ESD principles to create projects involving cross disciplinary design collaboration. It also employs these principles to assess the impact of these projects. The outcome is to develop skills and tangible experiences that include the circular economy model, for future designer practitioners.

These tangible 'real life' experiences are created to engage undergraduate design students to actively prepare them to become future agents for change. These 'real life' experiences are based upon the facets of the circular economy model and five education for sustainable development (ESD) principles described by UNESCO. UNESCO's consider future thinking, critical and creative thinking, participatory and participatory learning, partnerships and thinking systemically key principles for learning.

This study involves creating and assessing projects throughout the academic life of an undergraduate student. At the beginning and end of the academic year, all design students are provided with a questionnaire to assess their knowledge, skills, attitudes and shortcomings of sustainability, based on the key principles provided by UNESCO. They are in turn provided with collaborative 'real life' projects and at the end of the academic year presented with a questionnaire, aimed at establishing the reflective views, knowledge, attitudes, shortcomings and improvements that could made for the following year.

This study was initiated through the collaboration of four design disciplines, i.e. Product, Fashion and Interior Design and Landscape Architecture during the first year of undergraduate study. The students were provided with two collaborative projects. One being the task of launching a new Repair Café in Cheltenham in collaboration with 'Vision 21' a local charity, that supports the resale of used furniture, and Gloucestershire County Council Waste Team, that manages the recycling and disposal of waste throughout Gloucestershire.

The intension of developing and launching the Repair Café was for the students to gain first-hand experience of the circular economy and repair, to experience the key ESD principles through collaboration, to understand consumer attitudes and to analysis consumer products through deconstruction and repair.

This outcome of this project evolved into a new 'Regeneration Café' project ethos, an adaptation of the Repair Café concept to incorporate other facets of the circular economy. The launch of the Regeneration Café, for example, also incorporated 'reuse' as a theme through upcycling denim demonstrations and an exhibition, created by the Fashion students. The launch of the 'Regeneration Café' project, through feedback from the assessment, showed that students felt empowered, that they were able to make a positive change for the future. Shortcomings were noted and used for discussion with academic design leads.

Further Discussions with organisers and members of Hackerspace, Makerspace and the County Council Waste Team evolved from the Regeneration Café, The focus of these discussions are to develop workshops based on, the reduction of waste, reuse and creatively upcycling items, with the view of creating a local business enterprise. The intension of this research is employ the 'Regeneration Café as a platform to create tangible experiences based upon the circular economy model, continue assessing the impact of 'real' projects and to support local business enterprise start-ups based on sustainable practices.