Case Studies in Sustainable Development

Living Lab case study

As part of an MSc-level course on sustainability, students work in groups of four on practical research topics, conducted collaboratively with the Department for Social Responsibility and Sustainability.

Q. How did the LL project come about?

The Case Studies in Sustainable Development course in the School of Geosciences already included students doing project work in groups, but the students just researched a self-chosen case study of sustainability in the usual academic manner - they were not directed towards any practical outcome. One of the 2014 students, Elizabeth Tiffany, volunteered with SRS after the course, and had the bright idea of focusing the students' group projects to practical research on topics suggested by SRS, which would help inform their efforts to make the university more sustainable.

Q. What sort of projects have been undertaken and what were the outcomes?

SRS have provided project briefs on themes ranging from waste and recycling, to fair trade, to energy saving, to engaging researchers in sustainability. Students work over 11 weeks to research the problem and come up with solutions, liaising with SRS to ensure the context has been fully understood.

In terms of specific examples, in 2016, a group helped identify environmental and socioeconomic risks associated with food and drink purchased by the University, which helped SRS and Procurement complete their planned analysis using the Scottish Public Procurement Prioritization Tool.

Another group looked at ways of reducing business travel emissions at the University. One of their recommendations was to work with suppliers on incentivising train travel. Following collaboration between one of the students, Procurement and SRS, the University was offered a discounted first class Virgin East Coast service between Edinburgh and London. This led to an estimated modal change for 120 flights, which helped the University save close to $18k and over 30tCO2e.

Q. How has the course ensured that practitioners take note of students’ recommendations?

All students taking the course complete a short persuasive briefing paper, which is shared with SRS and with relevant operations colleagues. In the final week of the course, a half-day workshop is arranged where student groups present their research and recommendations. All relevant operations staff/practitioners are invited to listen to the presentations and ask questions.

Q. Have there been any challenges?

The 11-week timeframe can be a challenge – it’s a fairly short period of time in which to produce significantly useful outputs. Another challenge is to provide adequate support for students, whilst not overwhelming SRS staff - this was handled by careful setting of students' expectations and defining clear 'rules of engagement' with SRS staff.

Final remarks

The dynamism and high level of engagement of the students has been noteworthy - working on practical projects, with a real-world 'end-user' in mind seems to really motivate the students.

Prepared January 2017 by Liz Cooper, responses by course leader Simon Allen.