

B4. Developing an holistic and 'real world' view of sustainability by linking research and undergraduate assessment

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The reality of sustainable development is often most apparent when change is considered and two contrasting situations need to be reconciled. Within the academic discipline of human geography both rural and urban studies remain key areas of academic discussion, and increasingly this includes discussions on the rural-urban fringe in both a developed and developing country context (Lynch 2004; Hough 2004; Woods 2005; Cloke *et al.* 2006, Hall 2006). This active learning project grew out of a response to issues raised and proposed actions identified in the Urban Fringe Action Plan for southern Swindon. The funders of the initial research contract wished to see the development of an holistic and planned approach as central to the pursuit of sustainable development objectives. The long-term nature of the development and the strong relevance of the subject matter to an existing Level 3 module enabled a 'real world' assessment to be developed.

Aims

The aim of the activity is twofold. Firstly, an active learning project is developed based around a time-constrained assignment where the students (both campus-based and distance learning) are placed in a 'real workplace' situation that is appropriate to their discipline. Second, students are exposed to the range and interlinking of considerations associated with the sustainability of new housing developments, through holistic approaches such as green infrastructure planning.

Rationale

The validated outline of the Level 3 module *The Country and the City* is explicit that the module examines the 'theoretical perspectives on notions of rural and urban and the inter-relationship between them' as well as 'the relationship to cultural and demographic change'. The learning outcomes

indicate that by the end of the module students should be able to demonstrate that they:

- Have a critical understanding of the key theoretical perspectives on recent socio-cultural issues, change and conflict in city and country spaces of Britain
- Possess knowledge of important local issues, change and conflict drawn from a range of rural and urban case studies
- Are capable of positioning local case study material within the context of wider theoretical readings of change and conflict.

The opportunity arose to link a relevant research project undertaken by the module tutors with colleagues in the University's Countryside and Community Research Unit (CCRU). The research was funded by the Great Western Community Forest (GWCF) that is based around Swindon, Wiltshire and related to the development of an holistic approach called Green Infrastructure Planning (GIP) on three 'greenfield' areas designated for housing development. The long-term plans are to provide around 30,000 houses at three main locations around Swindon over the next twenty years. The aim of the funded research was to:

- Develop and propose a generic GIP process that can be adapted to different circumstances, and to suggest how it might be applied to the Swindon urban-rural fringe.

Community Forests are an initiative that developed in the 1990s as a mechanism to increase the woodland cover around twelve areas of England (Countryside Agency 2003). They promote community participation and education, so consequently the opportunity for involvement of staff from GWCF in the teaching aspects is something that is welcomed by the organisation.

Implementation

The relevance of the GIP approach was clarified once the definition was finalised and it was clear that this example could fulfil the need for a local case study within the learning outcomes. Green Infrastructure Planning has been defined as:

A network of multi-functional greenspace provided across the defined area. It is set within, and contributes to, a high quality

natural and built environment and is required to deliver 'liveability' for existing and new communities.

(TEP and IBIS 2005; Environment Agency 2005)

The main aspects of GIP are biodiversity, access routes, open space, historical and landscape, community and social, and commercial.

Thus the research is both relevant to the subject matter and the learning outcomes. Crucially, GWCF, as the funder of the research, agreed to make the background materials to the research used by the CCRU available in electronic form and these were added to the module's virtual learning environment, a WebCT site that was available to all students. The final meeting of the research project for all relevant stakeholders in and around Swindon was videoed, and this was also added to the WebCT site. The result was a comprehensive database for the students to work from once the time-constrained assignment began.

The time-constrained element is adjusted each year the module runs so that it reflects the situation in Swindon at the time of the assessment. For example, in the first year of operation, the students were asked to replicate the activity that was going on in Swindon at that early stage (Appendix 1). This reflected the position that the report had been received by various departments in Swindon Borough Council and they were each assessing its implications for their own department, and evaluating the expectations of linkages between local authority departments.

In terms of staff input, much of the academic and research input was already covered by the research project itself. Preparation activity specific to this assessment revolved around developing the WebCT database and facilitating access to various materials. The University's Learning and Information Services Department covered the cost of videoing the stakeholder seminar and streaming this as a presentation, so that it was accessible to all students *via* WebCT. The time commitment of external speakers was covered financially by the GWCF as it met some of their own key objectives concerning education. In subsequent years, a dialogue began around February or March in order to establish the current state of GIP related discussions and over the next month or so to determine a suitable task for the time-constrained assignment. The assessment is

required in May or June and the students have ten days to complete the task once the question has gone 'live' on WebCT.

Sustainability focus

The assessment has strong links to all three aspects of sustainability; economic, environmental and social. The partnership between GWCF and the University also ensures that students are exposed to issues of sustainability beyond the University. A number have commented of the benefits of having a 'real' situation on which to work. The GWCF coordinator, on looking at some of the students' work commented that the best is better than some of the documentation he has seen concerning this approach; there is however currently no mechanism for the work produced by the students to influence the developments around Swindon.

Active learning

The activity has a clear active learning premise as the content of the assessment is actually happening and the students have access to the same data, individuals and policy documents that those involved with the developments around Swindon are also using. In this sense the assessment is innovative and each year is able to progress so that it does remain 'current' in the way that theory and practice combine. The central core of the approach is the way in which different land uses and functions need to be reconciled if a sustainable approach is to be achieved. This reinforces a broad and inclusive approach to human geography that stretches over to areas of physical geography (biodiversity and ecology) and environmental science. The feedback suggests that the 'real-time' nature of the assessment with strong business and community links makes the learning more enjoyable for all concerned.

To summarise the links to active learning are:

- Linking the thinking, doing and reflecting
- Innovative ways of linking the theory and practice
- Developing inclusivity across the discipline
- Making learning enjoyable for everyone
- Connects with local authority, business and community issues

Feedback

Positive comments from students included:

- *Very interesting ... and have now decided to look for jobs where I can use the knowledge gained from it*
- *Excellent in terms of urban/rural relationships*
- *Got me thinking about rural/urban in a different way*
- *Very valuable for my CV*
- *'Most interesting module of the year*
- *Now have good theoretical and practical knowledge of the issues and conflicts between rural and urban UK*

A minority of students expressed negative views about the challenge of linking theories to the time-constrained assignment in an integrated way, the unfamiliarity of time constraints on assignments, and a lack of interest in the geography of Swindon.

The feedback clearly showed the level of involvement by the students. It is fair to say that many students were apprehensive about this exercise and did require a certain amount of reassurance. Crucially the contact from GWCF came to the University for a tutorial and question and answer session a few days after the time-constrained assignment had started. Thus students were able to question him on issues concerning Swindon and the exercise that they were set. It is interesting that the average mark for this exercise is typically higher than for the first assignment in the module, which is a traditional essay centred around theories and concepts.

Strengths and weaknesses

The strength of the exercise lies in the links between recent research contract and the learning outcomes of the module. This was not planned and was to some extent fortuitous. The fact that the GWCF has educational objectives makes the organisation more willing to become involved. As it has indicated, it is of benefit to its own review to be accessing higher education establishments. The students recognised the value of this type of assignment just before they graduate as it begins to prepare them for recruitment opportunities. The long-term nature of the Swindon development also means that should the assessment continue to work there is plenty of scope for new angles each year.

In terms of weaknesses, the links might be strained should particular individuals move on, for example, within the GWCF or in terms of module tutor. However, this may also give an opportunity for a different project and assessment to be developed. The other weakness is that in any one year there may not be a new suitable angle for the assessment.

Programmes

The Country and the City is a 15 CATS point module at Level 3. The module is studied by both campus-based and distance learning undergraduates on Geography, Community Development and Local Policy programmes.

Key words:

Rural-urban fringe; green infrastructure planning; 'real-time' projects; time-constrained assessment

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Appendix 1

Great Western Community Forest

The Great Western Community Forest is one of twelve Community Forests in England where local people and organisations are working together to create a better environment.

This exciting environmental project is creating a rich mosaic of woodlands, green spaces and areas for wildlife in and around Swindon and the surrounding towns and villages.

The Great Western Community Forest project is providing a high quality environment for homes, employment, education and recreation. It covers 168 square miles, stretching from Wootton Bassett to Faringdon, the Downs to the Thames. (GWCF 2006)

Appendix 2

Time constrained assignment

Using the information on WebCT regarding Swindon, review the opportunities presented by Green Infrastructure Planning to introduce a notion of 'smart development' to urban expansion. Develop this argument by analysing ONE of the following areas in depth indicating what information would be required and how it might be collected offering reasons for prioritisation.

- Biodiversity
- Access routes
- Open space
- Historical/Landscape
- Community/Social
- Commercial

You might like to attempt this by considering:

- How this information might be integrated and used alongside the other five areas to ensure an holistic development of the site; or
- Indicate how the type of development planned around Swindon might be used to initiate a sense of social cohesion within the new development as well as the surrounding areas.