

Universities and Local Sustainable Development

Commentary by Frank J. Convery, Chairman, Comhar Sustainable Development Council, Ireland

Introduction

Universities are engines of innovation. And yet they often play little role in energising their own adjacent communities. Collaboration with local authorities rarely goes beyond rhetoric. This results in losses to universities, who could benefit from the sense of place and the reality checks that localism brings. Simultaneously, communities lose the innovation that could sustain their economies and societies.

In this commentary, I want to focus on the general issue of collaboration between local authorities and universities. I use my own local situation – University College Dublin (UCD) and Dun Laoghaire Rathdown (DLR) County Council – as a case study demonstrating the challenges and how to move forward, using the sustainability agenda as a means of encouraging collaboration¹. Of course, the facts vary with the setting, and what applies here will not be germane everywhere, but there are some general lessons we can draw from the experiences of UCD and DLR.

My proposition is that real collaboration is unlikely at present, but that this can be changed, to the advantage of business, the community and the university. I use examples to highlight how the local can also be the global and vice versa.

Comhar, the Sustainable Development Council, has been given a new and exciting mandate in the Agreed Programme of the new government. We intend to act on this mandate to promote the role of universities in advancing the sustainable development agenda globally, nationally and locally and to make our intellectual capital count on the ground where we work and live.

Reasons for Current Low Levels of Collaboration

There are a few reasons why the degree and intensity of collaboration between universities and local authorities in general, and DLR and UCD in particular, are limited.

1. This commentary is based on a presentation to 'EnviroCom 2007 – Commerce and the Environment in Dun Laoghaire Rathdown', a conference and exhibition organised by Dun Laoghaire Rathdown Chamber, which took place in the O'Reilly Hall, UCD on Monday, 24 September 2007.

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University research is now globalised: we are competing with the best and brightest on the world's intellectual stage, and the potential for local considerations to advance is seen to be modest at best and a distraction at worst.

In the specific case of UCD and DLR, to the extent that 'local' is seen as relevant in Ireland, Dublin City dominates, and it is difficult for DLR to come out from the latter's shadow. In addition, the local authority itself does not identify how we can be more dynamic in advancing the local economy and quality of life: perusal of DLR's *County Development Plan 2004-2010* sees the knowledge economy as the way forward and talks of the importance of UCD, but there are no specifics about how to move forward in ways that are mutually beneficial.

Additional challenges impacting on potential collaboration between UCD and Dun Laoghaire Rathdown County Council are outlined in further detail below.

1. Difficulty in matching research capacities and priorities at UCD with local needs, both in regard to focus and timing.

Clark Kerr, when Chancellor of the University of California in the 1960s, defined a university President's job as: "Providing sex for the students, football for the alumni, and parking for the faculty".

While the last of these is still relevant, things have moved on. Research intensification is now a primary preoccupation of all major universities. Irish universities are aspiring to become global research institutions, and this is necessary if Ireland is to make the transition to a knowledge society. We are becoming more research intensive, and this demands time and effort that can crowd out other more local activity.

We are now judged on the quantity, quality and presentation of our research by peers from Berkeley, Berlin and Beijing. The world is literally our stage, and this involves constant electronic networking, presenting at international meetings, doing research, and publishing the findings in international journals and books. Publishing internationally means adding something to existing knowledge that is of interest to an international audience; knowledge of local interest only that is not set in an international context is unlikely to gain the necessary kudos.

To achieve and maintain high-quality research, we have to recruit high-quality staff and PhD students – often from abroad – and applying for funding is a necessary preoccupation. There is a rising tide of funding available locally from Science Foundation Ireland and a number of agencies, and from the EU. In this exciting arena, UCD is in catch-up mode, so the pressures on staff to deliver are acute and will intensify.

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Globalisation has another effect that can move us away from collaboration: an increasing share of our staff and graduate students come from abroad, and from outside Dun Laoghaire Rathdown, so there is no natural understanding of, or affinity with, the locality.

2. The ‘Big Brother’ effect of Dublin, and demographic dormancy in Dun Laoghaire Rathdown.

To the extent that we do have a local focus, Dublin City dominates as a psychological, social, economic, political, media, financial and intellectual reality. It is also easy to get to, and has an international brand.

Dun Laoghaire Rathdown is demographically stable, with growth slowing to 1.2 per cent (to give a total population of 194,000) in the 2002-2006 period. Zero growth – and an associated ‘greying’ of the population – may translate into antipathy to new development, to students and student housing, and to change generally; the status quo becomes the desired quo.

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3. Lack of integration in DLR’s Development Plan

In *Dun Laoghaire Rathdown County Development Plan 2004-2010*, there is acknowledgement of the centrality of the knowledge economy to the future economy and life of the community, and the importance of UCD and other third-level organisations as feeders of this dimension, but no specifics about how to harness the latter to support the former.

Proposals

If both UCD and Dun Laoghaire Rathdown County Council make sustainable development – reducing pressure on the environment, enhancing social interaction, supporting a dynamic knowledge-based economy and society – the centrepiece of their collaboration, both will benefit.

Making the local globally relevant and vice versa is key to this: reducing our own pressure on the environment by learning by doing and making UCD and DLR exemplars in this regard.

My proposals in this regard are outlined in further detail below.

1. From Local to Global – Learning from On-the-Ground Experience

It is possible to be simultaneously global and local.

Our writers have been doing this superbly for years. Patrick Kavanagh captures the essence in his poem ‘Epic’:

*Till Homer's ghost came whispering to my mind.
He said: I made the Iliad from such
A local row. Gods make their own importance.*

The same idea can apply to research and, in particular, to research focused on sustainable development. An example of this is how Ireland showed world leadership in developing and implementing a plastic bags levy. We have carefully documented and evaluated this story from various perspectives and published it internationally⁽²⁾.

⁽²⁾See: 'The most popular tax in Europe? Lessons from the Irish plastic bags levy', by Simon McDonnell, Frank Convery and Susana Ferreira, *Environmental and Resource Economics*, Vol. 38, 2007, pp 1-11, where we focused on a local story – the plastic bag levy – but set it in a global context. This paper has generated great interest internationally.

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I am currently directing the EPA-funded Urban Environment Project (www.uep.ie) in Urban Institute Ireland. This involves a multidisciplinary team developing a computer-based land-use model – **MOLAND** – in collaboration with the European Union, which integrates land-use change with change in transport infrastructure, housing development, and environmental performance, including air quality, climate change and biodiversity.

We are using the Greater Dublin Region (Dublin local authorities, including DLR, and Louth, Meath, Kildare and Wicklow) as the test-bed for this model. We have land-use maps derived from aerial photography and satellite imagery of this region for 1990, 2000 and 2006, and so can show change over time.

By calibrating the model using the time series data, we can also explain why such change took place and this gives us predictive power: if we put this rail line in, zone this area for dense development, this is what we can expect to happen. This will give the community, business, public representatives and officials in DLR a better understanding of past developments, the spatial context, and some capacity to explore different futures and their implications.

As part of this project, we also have a 'Green Cities' component, where - in collaboration with Tim Carey, Heritage Officer of Dun Laoghaire Rathdown County Council, and Gerry Clabby of Fingal County Council – we are exploring how to integrate our natural systems (biodiversity) into the development process. This project will allow us to publish internationally, on the basis that we are pioneering unique developments of the **MOLAND** model that can transform our understanding as to how land-use change can be linked to changes in transport, environment, etc. The fact that we are using DLR and adjacent counties as the test-bed will, in parallel, provide them with new insights and capacities. As part of the project, we will be providing training and capacity-building to staff members so that they can use the model to inform decisions at strategic level.

Sustainable development, as a research area, is highly relevant to people's lives. This will be important in helping justify research expenditure to the general public – who pay for most of it through their taxes – as we move forward.

Because we also have to mobilise many disciplines to advance knowledge in this area, a sustainable development research agenda can begin a process of mutual understanding.

2. Making Sustainable Development the Leitmotiv of University / Local Authority Collaboration

We are already in an era where pressure on the environment in general, and in regard to climate change in particular, needs to be reduced. The policy noose is tightening.

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At EU level, for those (power sector, combustion, heavy industry) in the European Union Emissions Trading Scheme, we have a price per tonne of CO₂ of €21.75**(3)**. In a recent study it is estimated that, for the EU to reach its 20 per cent reduction target by 2020, it will cost €16 billion, at a marginal cost of €33.5 per tonne**(4)**. So we can expect CO₂ prices to move upwards to about this level. To ensure consistency and economic efficiency, a levy on CO₂ at about this level – applied to the non-trading sector – is likely.

Domestically, there are many provisions in the new Agreed Programme for Government that will require dramatic changes in how we do things, for example an average three per cent per annum reduction in greenhouse gas emissions over the 2007-2012 period, in a context where emissions have been growing rapidly.

Places of learning at all levels should be exemplars of sustainable working and living. UCD needs to establish its performance base-lines and then make its campus a place where the easy thing to do is to reduce pressure on the environment, which means all buildings are close to being carbon neutral; transport by bus, foot and bike is easy and pleasant (and you are guaranteed that your bike will be there when you come back to it); use of water and other resources is minimised; to the extent feasible, waste is prevented and re-use is fostered; biodiversity on campus is cherished; interaction and intellectual challenge are pervasive.

3. Developing Flagships such as The Gateway Project

There is an advantage to having a flagship around which to animate and organise sustainability. UCD is fortunate in that it has such a fulcrum. The University has recently launched its Gateway project, an architectural competition that aims to establish an internationally recognisable signature image for the Belfield campus.

The competition attracted over 60 entries, and was won by Christoph Ingenhoven from Dusseldorf. His winning entry is described as follows:

The winning design has proposed a new building edge on to the N11 frontage of UCD, which in turn will enclose a revitalised green oasis at the heart of the university. These circular green spaces will be bounded by a tree-lined belt walk. The newly laid out open space will be traversed by pathways creating stronger linkages between the various campus buildings. To help form the centre circles, the architects propose reducing the size of the existing lake

(3)Point Carbon, 21 September 2007: www.pointcarbon.com

(4)Point Carbon, 20 September 2007:

http://www.pointcarbon.com/getfile.php/fileelement_122721/20_September_2007_CMA_Emission_reductions_2020.pdf

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and softening its edges. Green building design is central to the work of Ingenhoven Architects. ... The new Gateway complex integrates low energy and building control systems to reduce total energy consumption. Intelligent facades provide for insulation, natural ventilation and maximum daylight. Efficient lighting systems, solar and geothermal-backed conditioning systems and “non stand-by” technologies will also reduce energy demand(5).

I hope and expect that this will be the fulcrum for the adoption of a campus-wide sustainability strategy at UCD.

4. Enterprise, Innovation, Urbanity and Sustainability

The only way our planet and communities can be sustainable is if we develop and implement better ways of living with the earth. Innovation is the key, and the universities can be a creative engine in this regard. Given the right context and support, we can transform the world.

A key interface with the local community is the incubation units on most campuses, where start-up companies with innovation as a key strand are supported and mentored. In UCD, the Nova centre helps recent graduates to stay ‘local’ and develop their entrepreneurial side, bringing enterprise and academe together. This approach can also be a key interface in advancing the sustainability agenda of both universities and local authorities.

Scale and ideas go together, and so the Dublin region has an advantage in this regard. In an earlier commentary, I made the case for linking Galway, Limerick and Cork in a polycentric urban zone, which can capture the benefits of scale and retain the advantages of localism.

Towards a University / Local Authority Sustainable Development Partnership

Why not now establish a sustainability partnership, with the objective of making local authorities and their universities exemplars of best practice? This would mean updating the relevant Development Plans to establish baselines and identify specific targets and mechanisms, including zoning and planning permission. The universities could make sustainability part of their face to the world, and use it to help recruit students and staff, giving them all a sense of place.

Seamus Heaney argues that we all, in a sense, hanker after rootedness in space:

(5)

http://www.ucd.ie/campusdevelopment/announcements/072407_gateway.html

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We are dwellers, we are lovers, we make homes and search for our histories... And I am convinced that it is to... the land itself that we must look for continuity.

This is perhaps less true now than in the past, but with every academic community in Ireland now becoming a wonderful international polyglot of talents, the need to create a sense of place is increasingly important. A well orchestrated and substantive local academic sustainability strategy can anchor this idea.

A former professor of English at UCD, Seamus Deane, nicely expresses the misgivings some academics have about confronting on-the-ground realities:

*I remember at times
How irresponsible I have
Become. No ruling passion
Obsesses me, although passions
Are what I play among.
I'll know the library in a city
Before I know there is a slum.
I could wish the weight of
Learning would bring me down
To where things are done.*

Sustainable development can bring some of us, at least, to where things are done.

Further Reading / Links

Comhar was established in 1999 as the forum for national consultation and dialogue on all issues relating to sustainable development.

WEBSITE: www.comharsdc.ie

The Comhar SDC Annual Conference will take place will take place on 7th and 8th November 2007.

Find out more and register at

<http://www.comharsdc.ie/conference2007/index.htm>

Towards Sustainability in the National Development Plan 2007-2013

[http://www.comhar-](http://www.comhar-nsdp.ie/COMHARDocs/Towards_Sustainability_in_the_NDP_2007_2013.pdf)

[nsdp.ie/COMHARDocs/Towards Sustainability in the NDP 2007 2013.pdf](http://www.comhar-nsdp.ie/COMHARDocs/Towards_Sustainability_in_the_NDP_2007_2013.pdf)

Comhar SDC Recommendations on the Review of the National Sustainable Development Strategy

http://www.comharsdc.ie/_files/SDS%20Discussion%20Document%20final%20version%2027sep07.doc