ISSN 1682-3451
Higher Education Management and Policy
Volume 21, No. 1

The Regional Engagement of Universities: Building Capacity in a Sparse Innovation Environment

by
Paul Benneworth and Alan Sanderson
University of Twente, The Netherlands, and
Universities for the North East, United Kingdom

There are increasing pressures for universities to commercialise their research and increase their contributions to their local and regional environments. For those institutions located in areas of low demand, this can lead to a low-impact equilibrium of universities working with external partners, and having relatively low impact. In such circumstances, universities have to "build up" local demand for their knowledge. But this is long-term, costly and volatile, and so partnership and collaborative models of capacity building may be one way for universities to maximise the benefits whilst minimising the risks. In this paper, we explore how capacity in such situations builds up, and whether university regional associations (URAs) can help universities to develop regional capacity in such situations. The case study demonstrates that URAs can become a focal point for a community of regionally engaged university actors. It is this community which can help universities to rationalise and make sense of local uncertainties, and thereby increase total university regional contributions.

ISSN 1682-3451
Higher Education Management and Policy
Volume 21, No. 1

L'engagement régional des universités : comment le renforcer en l'absence de pôle d'innovation à l'échelon local ?

par
Paul Benneworth et Alan Sanderson
University of Twente, Pays-Bas, et
Universities for the North East, Royaume-Uni

De plus en plus, on attend des universités qu'elles commercialisent les fruits de leurs efforts de recherche et intensifient leur contribution locale et régionale. Mais, pour les établissements implantés dans des zones où leurs travaux suscitent une demande limitée, la collaboration des universités avec des partenaires externes risque fort d'avoir un impact, là aussi, limité. Dans ce cas, c'est aux universités de « créer » une demande de connaissances à l'échelon local. Mais il s'agit d'une démarche longue, coûteuse et à l'issue incertaine ; dans cette optique, les modèles de renforcement des capacités basés sur le partenariat et la collaboration interuniversités pourraient permettre aux établissements concernés de maximiser les bénéfices tout en minimisant les risques. Dans ce rapport, nous analysons la façon dont se créent les capacités d'engagement régional dans ce type de contexte, et nous nous efforçons de déterminer si les associations régionales d'universités (ARU) peuvent alors aider ou non les universités à développer leurs capacités régionales. L'étude de cas proposée montre que les ARU deviennent parfois le cœur névralgique d'un consortium d'acteurs universitaires engagés au plan régional. C'est précisément grâce à cette communauté d'acteurs que les universités peuvent faire face aux contingences locales et s'y adapter, ce qui permettra d'accroître la contribution régionale totale des universités.

Introduction

It is now widely accepted that a key element of the social compact between universities and their host societies is the provision of knowledge of wider value. Some have argued that this is a recent development, related to wider changes in the nature of society and of knowledge production (*e.g.* Gibbons *et al.*, 1994), as universities have lost their privileged role as monopolist producers of certain types of knowledge, facing increased competition in the "global marketplace of ideas" (*cf.* Bryson, 1999). Others have pointed to an increasing salience for universities' knowledge, given the increasing importance of knowledge capital as the basis for economic competitiveness and productivity growth (*cf.* Temple, 1998). This raises the question of how far universities' duties extend to responding to demands placed on them by external stakeholders given their core funding and research missions.

Although universities are often stereotyped as "ivory towers" whose academics shun broader roles, universities as institutions have evolved in response to wider social pressures, with new types of universities emerging in response to particular social contexts (Delanty, 2002; Arbo and Benneworth, 2006). Indeed, even institutions which have sought to exclude worldly influences from the academic sphere have found that it is impossible to completely stem universities' wider social impacts (Feldman and Desrochers, 2003). The notion of university/community engagement is now uncontroversial, as it is embodied in the rise of the "third" (engagement) mission for universities.

What remains controversial is balancing between teaching, research and engagement missions, negotiating excellence and relevance, and exploiting existing knowledge without compromising production of new knowledge (Brink, 2007). Engagement is often a peripheral activity, and unless successfully embedded within a wider institutional change, remains peripheral to the core – teaching and research – activities of the university. Clark (1998) argues that long-term change within universities requires long-term institutional support, which usually also equates to a long-term stable funding stream. This raises difficulties for policy makers and politicians under pressure to produce short-term results. How can long-term organisational change to facilitate community engagement be built under such short-term policy horizons?

To explore this, we examine the way in which one particular established knowledge transfer institution in one region has made the transition from a one-off project to established regional institution. The organisation, "Knowledge House" in the North East of England, built up a strong community of individuals providing the service of getting academics to answer business questions. This community has become important to the partner universities in demonstrating commitment to engagement, and embodies an attractive promise of further potential for commercialisation if external parties invest in the universities.

Generative and developmental approaches to university engagement

One policy approach to promoting university engagement has been to encourage universities to become more active in providing various kinds high technology services such as new patents and licenses, talented staff, research and development (R&D) infrastructure such as clean rooms, and new high-technology businesses (Bradshaw and Blakely, 1999). Universities can be directly rewarded for providing these services more efficiently and more in line with regional needs. There are a number of problems with this approach, not least:

- In regions whose higher education (HE) and business sectors do not have significant overlaps, it may be difficult to find shared rationales for collaboration (Fontes and Coombes, 2001).
- It can overlook the direct economic significance of higher education as a magnet for talent and as an export industry in its own right (Goddard and Chatterton, 2003).
- It can ignore the potential that universities have to change regional economic structure, as a source of novel business and policy ideas (Gunasekara, 2006a).

Gunasekara (2006b) argues that these other kinds of university contributions can be qualitatively more important to regional economic development than the provision of particular services. He terms service provision a "generative" activity in contrast to "developmental" contributions, in which universities change the nature of the regional environment, working with policy makers to tailor particular policy instruments both to companies' needs and universities' capacities.

In such situations, universities' contributions come as working in regional partnerships to find common solutions to regional problems rather than directly providing services. Universities' own knowledge bases may help regional partners to look more intelligently at particular situations. However, because universities do not have perfect knowledge about regional needs and opportunities, some advance comes through regional co-learning,

where universities and regional partners experiment with potential regional solutions (*cf.* Muller and Zenker, 2001; Benneworth and Dawley, 2004). This co-learning can benefit the universities' core missions, and provide them with a rationale to engage regionally beyond merely wanting to be good corporate citizens.

A heuristic for this co-learning might be that a university and regional development agency co-fund a regional technology centre or liaison office providing consultancy support to all businesses (Garlick *et al.*, 2006). The individual transactions in turn create a database of regional innovative businesses, from which a regional cluster organisation can be mobilised, which might in turn create demand for a "cluster house" (incubator) around the technology centre. A "growing cluster house" could encourage property developers to create new industrial estates near universities (science parks). The presence of a network of innovative companies on a science park might in turn help the university to win funding for basic research, using the cluster to demonstrate that its research activities do produce social benefits. In seeing a clear benefit from its engagement activity, the university therefore becomes committed to engagement, and those various institutions created – the technology centre, cluster house and science park – are also supported by the university, increasing their chance of success.

Following this heuristic, we ask whether it is possible, in a less successful region where innovation policies are hard to deliver effectively, to initiate this capacity-development trajectory? To explore this question, we look at the case of the North East of England, which partially draws on the OECD review of its universities' regional contributions (Duke *et al.*, 2006). In the case study, we produce a stylised analysis of what is happening in the region in order to explain Knowledge House's impacts, based on both the peer review visit in 2005 as well as follow-up interviews with senior academics across the regional universities in 2006 (Goddard *et al.*, 2006) and Knowledge House (2006) staff. We distinguish between three groupings within the universities, senior managers, academics and knowledge transfer professionals. This allows more general lessons to be developed towards an accepted model of good practice, and we acknowledge that the regional reality may be somewhat fuzzier than our stylised model suggests.

The evolving policy environment for English knowledge transfer

Over the course of the last ten years, the United Kingdom has witnessed an increasing governmental emphasis on innovation as a driver of productivity growth and economic development, led by the UK Finance Ministry, Her Majesty's Treasury. A series of Treasury policy papers have identified a GBP 30 billion "gap" in the United Kingdom's economic performance

in those regions with below average productivity levels (HM Treasury, 2001, 2003a, 2006). The government's stated intention has been to close this gap without directly redistributing public resources between regions, by investing in success and removing barriers to economic growth. For less favoured regions (with below average productivity), universities may represent important sources of potential regional economic growth, and much effort has been devoted to stimulating universities to maximise their territorial economic benefits.

Similarly, this changing approach to economic development policy has precipitated an evolution in governmental attitudes towards universities' knowledge transfer activities. In 1994, as part of an attempt to lobby for increased overall HE funding, the UK's sectoral HE group the Committee of Vice-Chancellors and Principals, published the report *Universities and Communities* (Goddard *et al*., 1994). The subsequent National Committee of Inquiry into Higher Education (the "Dearing" Inquiry) (NICHE, 1997) included a chapter on universities' regional contributions (Robson *et al*., 1997), and the main report concluded that HE institutions (HEIs) should be formally represented on regional economic bodies. This laid the foundations for a rapidly rising governmental interest in universities' regional contributions, which can be categorised into three distinct phases (HEFCE, n.d.):

- **Experimental** (1998-2001): A fund – Higher Education Reach Out to Business and the Community (HEROBAC) – was created to give all HEIs the opportunity to bid for, granting up to GBP 1.1 million to work better with businesses and communities, a total of GBP 66 million being awarded to 137 projects.
- **Enthusiastic** (2001-04): HEROBAC was expanded into the Higher Education Innovation Fund (HEIF), and universities were encouraged to develop regional consortia to become more systematically engaged (GBP 166 million awarded to 213 projects).
- **Consolidating** (2004-07): There was a shift to metrics-based funding for all eligible HEIs whilst reserving one quarter of the total fund (GBP 238 million) for innovative consortia, typically cross-regional teams working in emerging technological fields (11 in the first round).

However, there has also been a shift in the government's attitude to the "regions", which has evolved in response to an entirely different set of territorial policy drivers, although ultimately still addressing England's persistent territorial economic imbalances. For a brief period from around 2000 to 2004, it appeared that England was set on an unstoppable process of devolution towards elected regional assemblies. Regional development agencies (RDAs) were created and the government invested much effort in encouraging other "regional" bodies to be formed to work initially with RDAs and eventually with the elected assemblies. Funding was provided to create higher education

regional associations to help universities work effectively with the other new institutions. However, following a "no" vote in the first referendum on elected regional assemblies, there has been a steadily declining interest in the regional scale and for collective regional activity by universities, with more emphasis being placed on localities and city-regions (HM Treasury *et al.*, 2007).

In this period, there have also been a number of other changes which have more indirectly impacted on universities' knowledge transfer activities:

- A business advice organisation for small businesses, Business Link, was created, then repeatedly reorganised, disrupting efforts to develop links with academics to help firms get over the threshold into universities.
- European regional development funds have been (in some regions hugely) important since the early 1990s when UK universities were granted access to these funds. As these funds are now being shifted to the new European Union member states, these resources are not available as freely as before, and activities dependent on those funds may be jeopardised.
- In 2004, the Treasury introduced a new tax avoidance regulation that penalised spin-off companies, so universities suspended much spin-off activity for 18 months until the situation was resolved.

Thus, although the United Kingdom and England can be characterised as moving towards a more favourable environment for the promotion of universities' knowledge transfer, there is still a degree of volatility and friction between competing policy drivers. How has this volatility affected universities' institutional efforts to build up capacity to interact more effectively with businesses? To explore this we consider one knowledge transfer activity in one UK region which has dealt with this volatility, and has helped create a more receptive environment within regional universities for the "third mission".

Knowledge House emerging as a North Eastern institution

The North East of England is an old industrial region, which industrialised from the late 18th century onwards, but since 1900 has entered a prolonged and steady period of structural decline, failing to establish strong market positions in emerging new technology industries. In the post-war period, this decline was partly mitigated through attracting inward investment, whilst a number of businesses established R&D activities in the region, notably utilities firms (including electricity, water and gas), in the chemicals sector on Teesside, but also in shipbuilding, where the region hosted the national British Shipbuilding Research Association. However, from the 1980s, these activities came under increasing pressure from deregulation, privatisation and cost reduction. There did not appear to be critical mass within the existing business R&D base to develop new industries to replace the jobs lost from the

region, and inward investment could not provide an easy or quick fix to these more deep-seated structural problems.

The five regional HEIs, Durham and Newcastle Universities, and polytechnics (higher professional universities) at Newcastle, Sunderland and Teesside seemed to offer a source of regional modernisation, with the potential to create new industries, raise regional growth levels and tackle high unemployment. Local government (municipalities) was at that time investing in technology centres as part of efforts to help regional businesses deal with technological change, particularly automation (such as numerical control) and computerisation. These centres developed varying degrees of linkages to the five regional HEIs. Arguably the most closely linked centre, Newcastle Technology Centre, was created by Newcastle City Council, the polytechnic and university; this was not immediately successful, and evolved over five years into a regional technology centre (Loebl, 2001).

At that time (1983), the five regional HEIs identified a clear value in working together **collectively**. This was because of the very small size of the local market for technological services for small and medium-sized enterprises (SME), the fact that UK universities at that time were not able to access European funding for regional development, and the relatively high start-up costs universities faced in establishing dedicated technology transfer activities. A scheme was initiated by Newcastle University, HESIN (Higher Education Support for Industry in the North), in which the other four HEIs were involved. As an independent organisation, HESIN was eligible for funding from the European Regional Development Fund (ERDF) which ensured its survival and allowed it to become the focus of a number of other critical developments.

In 1989, the national funding council for higher education (the Higher Education Funding Council for England, HEFCE) encouraged the North East's universities to develop an MBA-level course for regional businesses. A proposal was developed through HESIN to offset individual institutional start-up costs by beginning from existing courses and creating one regional pathway through the five HEIs. This project became the "Integrated Graduate Development Scheme" (IGDS), and was generally successful in terms of take-up by regional businesses. Perhaps more importantly, its financial success (attracting around GBP 600 000 of grant funding and GBP 700 000 of industrial fees) was sufficiently eye-catching to alert the HEIs to the fact that third-stream activities could generate significant additional resources for them. The IGDS scheme ran for around two years at full power, at which point the (very limited) regional market for executive MBAs was exhausted, although the region's universities still retain the power to award joint degrees.

In 1995, a second stimulus was provided, when the Treasury changed university funding regulations permitting access to European Structural Funds. Universities preferred to bid individually for large scale infrastructure investments which supported research activities, but in it was clear that the continuing small regional market and high start up costs made commercial consultancy prohibitively expensive for a single university. In response, Newcastle University proposed a hybrid infrastructure/consultancy project proposal, for a so-called "Knowledge House", a physical location where companies could come onto campus and ask the university for help with their technical problems. The European funding committee in the region decided that it was too infrastructure-heavy for the outcomes promised, but offered instead to fund a virtual version of "Knowledge House", where SMEs could come to all five universities with their problems. This proposal became Knowledge House, in which a central office and co-ordinators at each university helped firms both to identify and then to deal with academics to solve their technical problems.

That activity, solving SME problems by helping them contact academics, has formed the core of the Knowledge House mission since 1995, although the organisation has developed in the ensuing decade. Knowledge House received three tranches of ERDF funding, totalling GBP 3.9 million over the period 1995-2005, as well as GBP 4.2 million from the universities' funding council through their HEROBAC and HEIF programmes (*qv*). Knowledge House figures set out in Table 1 indicate the increasing scope and scale of activity:

- Scope: More universities and staff became actively involved in Knowledge House projects. In 1996, only three universities completed projects, whilst by 2008, all universities were active (see Table 1). With over 300 projects being completed annually, this suggests that an increasing number of staff across the region's universities are becoming engaged with Knowledge House activities.
- Scale: The size of the projects (and the income to the university) has been increasing across the lifetime of the project, even when adjusting for inflation (see Table 2).

In 1999, HESIN became Universities for the North East (UNE, the North Eastern HERA) ostensibly to create a single university voice for the newly created RDA. Whilst HESIN was a voluntary collaboration involving pro vice-chancellors (directors), UNE involved the vice chancellors (chief executives), empowering UNE to speak with the authentic voice of higher education in the North East. UNE has been important in generating cross-university activities, including securing continuation funding for Knowledge House. A typical multi-university project successfully promoted by UNE has been the creation of "talent programmes" allowing students with a

Table 1. **Share of project numbers by participating university (anonymised)**

Percentages

	University A	University B	University C	University D	University E
1996	8	24	0	28	40
1997	9	44	15	18	15
1998	2	52	14	13	18
1999	6	47	4	27	16
2000	15	42	6	6	31
2001	20	33	2	19	26
2002	28	43	0	8	21
2003	36	42	1	12	10
2004	26	32	2	30	10
2005	16	28	2	20	33
2006	12	18	4	15	51
2007	3	9	13	19	55
2008	8	4	24	24	41

Source: Knowledge House internal management information system.

StatLink http://dx.doi.org/10.1787/544778024534

Table 2. **The growth in core Knowledge House activities 1996-2008**

	Enquiries	Projects	Total value (nominal)[1] GBP	Total value (real)[1] GBP	Average contract (nominal) GBP	Average contract (real) GBP
1996	26	25	43 083	61 377	1 723.32	2 455.08
1997	110	101	421 872	586 841	4 176.95	5 810.31
1998	348	91	357 225	481 799	3 925.55	5 294.49
1999	318	90	443 749	578 658	4 930.54	6 429.53
2000	276	49	266 773	342 599	5 444.35	6 991.82
2001	333	87	507 490	633 013	5 833.22	7 276.01
2002	392	110	628 457	770 256	5 713.25	7 002.33
2003	490	158	863 638	1 041 141	5 466.06	6 589.50
2004	735	189	1 314,647	1540 305	6 955.80	8 149.76
2005	740	166	3 234 835	3 680 480	19 486.96	22 171.57
2006	623	180	5 206 308	5 760 855	28 923.93	32 004.75
2007	811	364	4 685 096	5 042 925	12 871.14	13 854.19
2008[2]	461	185	3 081 191	3 213 682	–	–
Total	5 665	1 795	21 054 365	23 733 932	11 729.45	13 222.25

1. The contract values are given in nominal and real prices, indexed to retail price inflation (RPIX), taking 2008 as the datum year.
2. The 2008 figures only include projects completed and do not represent the final figures for 2008.

Source: Knowledge House internal management information system.

StatLink http://dx.doi.org/10.1787/544814677262

talent for music or sport (even outside their degree) to receive high-level university coaching and education whilst studying at a North Eastern university. UNE has also co-ordinated the universities' widening participation efforts, encouraging more students from poorer backgrounds to come to university.

UNE has also acquired other elements and projects, as there have been a number of occasions where the regional universities, again motivated by economies of scale, have chosen a regional approach for developing new engagement activities (*e.g.* providing post-experience business education and widening participation). The Knowledge House network has grown to 14 staff, and in 2007 generated GBP 4.7 million for the participating regional institutions by delivering 364 completed projects from over 800 business enquiries. UNE co-ordinated the university's participation in Newcastle-Gateshead's (ultimately unsuccessful) bid for European Capital of Culture. Knowledge House has also been identified repeatedly as an example of best practice in university/business engagement (see *inter alia* CORDIS, 2000; SHEFC and SE, 2002; HM Treasury, 2003b; DG REGIO, 2004; Duke *et al.*, 2006; NESTA, 2007; OECD, 2009).

Top-down/bottom-up *vs.* regional co-ordination

The Knowledge House evolution appears to have followed a remarkably smooth trajectory given the relatively disparate national policy regimes and drivers to which it has been subjected. One way of interpreting this consistency in evolution would be to argue that what national policy has done has provided funds which in turn offer an opportunity for a time-limited experiment. When those funds have expired, successful elements have been retained and developed, whilst unsuccessful ideas have been abandoned. Yet this simple message, that universities *make* valourisation policies succeed and integrate the third mission into teaching and research activities, overlooks the point that Knowledge House is a long-lived consortium arrangement, a network which has only slowly built influence, and only very slowly changed universities' ways of doing business.

One way to consider the effects of Knowledge House is to clearly distinguish between the "top-down" and "bottom-up" effects. Knowledge House has promoted changes in the member universities' approach to technology transfer amongst senior management by both creating a need for them to be regionally engaged and demonstrating the value of technology transfer. Knowledge House has helped to support the pro vice-chancellors responsible for engagement by offering a task for them to work on collectively, overseeing Knowledge House through UNE's business and enterprise committee. Knowledge House as an acknowledged best practice in regional engagement has also become emblematic of the universities' commitment to

Table 3. **Reference to Knowledge House in institutional HEIF3 reports**

University	Internal	External
Durham	*	*
Newcastle	"Risk management [of knowledge transfer projects] will be delivered at the project level through the Knowledge House Information System."	"Knowledge House collaboration across the Universities for the NE continues to be important and will be supported by a dedicated allocation from each University in the NE."
Northumbria	"Providing an interface with business through Knowledge House, which has been running successfully for over 10 years. Core activities focus on consultancy and access to facilities, but the portfolio of services will diversify through this collaborative network."	"HEIF funds will be used to retain the local Knowledge House staff on permanent contracts and also contribute to central Knowledge House services, covering a range of business development and marketing functions at regional level."
Sunderland	**	"The University will commit some of its HEIF3 funding to continue its Knowledge House activity for 2 main reasons. Firstly the Knowledge House clearing house demonstrates a clear commitment to business and the community that the regional universities will provide the best possible response to their enquiry. Secondly the partnership enables collaborative activities at a scale the University would not achieve on its own."
Teesside	"Objective: Integration of Knowledge House delivery with institutional activity. Benefit: Robust collaborative network with complementary strengths."	"Knowledge House activity and targets form a central plank in our strategy, delivering an enhanced coordinated HE service to business and stimulating additional contracts."

* The Durham HEIF3 plan is much shorter than the other universities' – 500 words in comparison to 1 500-1 900 words for the others – and so there is less space to mention Knowledge House.

** Sunderland does not mention here internal benefits of the HEIF programme, but does in HEIF4.

Source: University institutional HEIF reports, *www.hefce.ac.uk*.

the region (see Table 3). The universities value this – and hence regional engagement – as an opportunity to win additional funds from regional bodies.

Since 2007, Knowledge House has been funded directly by university subscriptions without an underpinning direct subsidy. This implies that Knowledge House has stimulated development in the attitudes and behaviour of university senior managers, and that they are now willing to invest core resources in knowledge transfer activities. Knowledge House is also mentioned in the knowledge transfer reports that the regional universities supply to the national funding council, the so-called HEIF (*qv*) proposals, as a means of co-ordinating internal knowledge transfer activity as well as promoting better collaboration between universities in business interaction.

From the bottom-up, Knowledge House has also been important in changing the behaviour of academics towards commercialisation, hence contributing to the evolution of a more engaged (if not entrepreneurial) culture within the region's universities. In 2006, an analysis of ongoing user surveys highlighted that Knowledge House was increasingly well regarded by

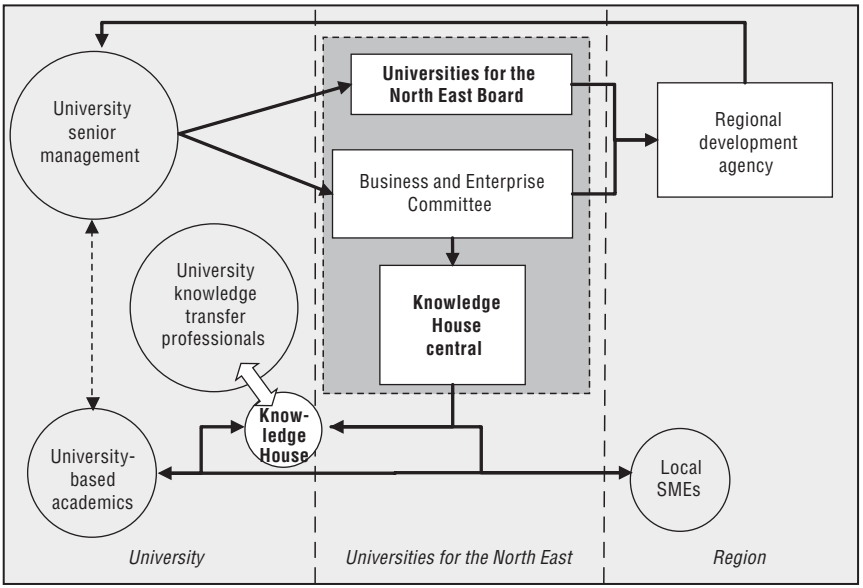
its customers – customer satisfaction rose from 77% (2002) to 94% (2005). From the academic perspective, Knowledge House does act as an opportunity creator, releasing the academic from the need to undertake acquisition work; Knowledge House also manages the contractual situation for the academic which allows the client to receive the knowledge without the academic having to alter their behaviour so extensively. The funds generated by Knowledge House also flow directly to the academic's work group and so can help to directly strengthen the research group. The figures in Table 1 suggest an increasing number of academics choosing to engage with regional businesses through the service. Knowledge House has also therefore reflected in part a development in the attitudes and behaviour of academics in the regional institutions.

These two effects, both on constituent parts of the regional universities, have evolved in tandem with each other. On the one hand, university senior managers have experienced a rising interest in the regional engagement agenda (as demonstrated by their increasingly direct and unsubsidised support for Knowledge House). On the other hand, and in parallel with that, increasing numbers of their academics are experiencing the benefits of becoming more commercially engaged, and enjoying the experience. Thus, HEIs have become more regionally engaged without the managers having to take potentially antagonistic steps to compel committent by their staff, whilst academics have had an encouraging organisational framework to support voluntary regional business engagement. Knowledge House has also been able to be extremely experimental as a place where risky reach-out activities can be attempted, whilst preventing failures from "contaminating" universities' core interests and brands.

Knowledge House is an interesting vehicle, because it was established with the "third task" as its first mission, namely answering the enquiries of entrepreneurs; it is left to individual academics to resolve the tensions which arise in responding to opportunities, rather than trying to change the course of the five universities which one interviewee likened to that of a super-tanker. One way to conceptualise this is that Knowledge House has played the role of a co-ordinating mechanism which has allowed university senior managers and their academics to develop in a coherent direction without creating friction and resistance through direct relationships. This co-ordination role is set out in Figure 1.

The Knowledge House institution has developed because its network connections appear to have allowed it to become the answer to a range of external demands placed upon the university. This arrangement satisfies the needs of both university managers and academics by permitting engagement, without that engagement being dependent upon initiating significant institutional upheaval or negotiation between these two levels. These networks are supported by a community of knowledge transfer professionals

Figure 1. **The role of Knowledge House in co-ordinating tricky institutional change in universities in the North East of England**



in Knowledge House and the universities. Universities have evolved towards a more engaged position with closer relationships between core funding streams and regional engagement.

What is striking is that the arrangement in Figure 1 has no clear imprint from any of the policy streams developed by the national government. Although Knowledge House was created before the first wave of governmental interest in commercialisation policy, it has nevertheless engaged extensively with the policy waves (as shown above in section "The evolving policy environment for English knowledge transfer"). Knowledge House remains an elusive example of best practice that other UK regions have sought to copy, yet we are aware of none that have successfully replicated its dual role as an agent of change and provider of commercialisation services. This raises an interesting set of conclusions for developing policies to effectively encourage universities to change their practices towards commercialisation and community engagement.

Conclusions: lessons for institutional building in higher education

The policies in the United Kingdom adopted for commercialisation by universities appear to be based on a relatively simple model of organisational change within HEIs, which does not fit well with the longer term processes in evidence in the North East of England. As we have noted, the universities have

been generally speaking keen to become more engaged but have needed a successful example to give them the confidence to invest their own resources in engagement activity. In each policy intervention, a fund was created in which universities bid institutionally for funding and then were responsible for driving through the necessary changes in their institutions. However, in some cases, the projects were delivered without driving through cultural changes within the university, so that the projects did not offer a sound basis for continued development of an engaged culture within the university (*cf.* HEFCE, 2006).

The Knowledge House project *did* contribute to cultural change, but as one part of a longer-term reorientation driven by the universities themselves and supported by a number of government policies, which encouraged external partners to demand (and reward) universities to change their behaviour. Knowledge House became a means to make several incremental cultural changes at different levels of the university simultaneously without creating conflict and resistance within those institutions. Part of the change was in creating a new grouping within the university, the knowledge transfer professional, but equally important was in raising that group's status in the eyes of other groups within the universities, the senior managers and the academics.

Knowledge House is an external activity which has nevertheless been part of an evolution of the regional universities' attitudes to commercialisation. But its purpose has not been to change attitudes, rather it has provided a loose coupling between different segments of the university: this allows institutional changes to be supported by both managers and academics, rather than using an ill-fitting hierarchical, top-down model of institutional change makers. Change has been embedded within a larger organisation, UNE, which assembles and co-ordinates the universities' corporate interests, providing Knowledge House with a degree of stability as an external organisation. As Clark (1998) indicates, it can be extremely difficult for universities to maintain commercialisation organisations because they drift institutionally to the edge of universities, from where they are easily closed down. Knowledge House has been anchored in the individual institutions by a kind of peer pressure provided by UNE's Business and Enterprise Committee.

We stress the importance of the "engagement community" – in both Universities for the North East and the universities, which make engagement work and make it something that both academics and university managers can support. The community are focused on delivering the primary process, namely getting academics to answer business questions. However, the experience of delivering this primary process, and its visible success and support across UNE and its member institutions, allows the community to support the development of a more engaged culture within the university.

The role for Knowledge House has therefore been to manage that community to ensure that the primary purpose is delivered, and in doing so has responded positively to a number of stimuli where they have supported this core mission. Whilst it is difficult for a single policy instrument to create a community of knowledge transfer professionals, there may be value to policy makers in using this community perspective to examine whether the various policy measures funded are supporting all the community elements necessary to incentivise HEIs at all levels to change their behaviours and become more engaged.

Acknowledgements

This paper was prepared for the 2007 IMHE conference "Globally Competitive, Locally Engaged: Higher Education and Regions" in Valencia, Spain. The authors would like to acknowledge the support of Research Councils UK, the University of Twente, Netherlands, and the ESRC project "Universities and community engagement: learning with excluded communities" (Project No. RES-171-25-0028) for their contribution to the preparation of this paper. The authors would like to thank Vin Massaro, Michael Shattock, Mark Jackson and two anonymous referees for their comments on earlier drafts of the paper. Any errors or omissions remain the responsibility of the authors.

The authors:

Dr. Paul Benneworth
Centre for Higher Education Policy Studies
University of Twente
7500 AE Enschede
The Netherlands
E-mail: p.benneworth@utwente.nl

Alan Sanderson
Universities for the North East
1 Hylton Park
Wessington Way Sunderland SR5 3HD
United Kingdom
E-mail: a.sanderson@unis4ne.ac.uk

References

Arbo, P. and P.S. Benneworth (2007), "Understanding the Regional Contribution of Higher Education Institutions: A Literature Review", *OECD Education Working Paper 2007/09*, OECD, Paris.

Benneworth, P.S. and S. Dawley (2003), "How Do Innovating Small and Medium Sized Enterprises Use Business Support Services", *Report to the Small Business Service,* URN 03/540, Small Business Service, Sheffield.

Bradshaw, T.K. and E.J. Blakely (1999), "What are 'Third-Wave' State Economic Development Efforts? From Incentives to Industrial Policy", *Economic Development Quarterly*, Vol. 13, pp. 229-244.

Brink, C. (2007), "What are Universities for?", Vice Chancellor's Lecture, Newcastle-upon-Tyne, 27 November.

Bryson, J. (1999), "Spreading the Message: Management Consultants and the Shaping of Economic Geographies in Time and Space", *in* J.R. Bryson *et al.* (eds.), *Knowledge, Space, Economy*, Routledge, London.

Clark, B. (1998), "Creating Entrepreneurial Universities: Organisational Pathways of Transformation", Pergamon/IAU Press, Oxford.

CORDIS (2000), European Trend Chart on Innovation, Trend Report: Industry-Science Relationships, covering period: July 2000-December 2000, DG XII, Brussels.

Delanty, G. (2002), "The University and Modernity: A History of the Present", *in* K. Robins and F. Webster, *The Virtual University: Knowledge, Markets and Management,* Oxford University Press, Oxford.

DG REGIO (2004), "Competitive Regions: Shaping Best Practice II", Seminar Report Rovaniemi, Lapland, Finland, 13-15 October 2004, DG REGIO, Brussels.

Duke, C. *et al.* (2006), "North East of England", Supporting the Regional Contribution of Higher Education Institutions to Regional Development, *Peer Review Report*, OECD/IMHE, Paris.

Feldman, M. and P. Desrochers (2003), "Research Universities and Local Economic Development: Lessons from the History of Johns Hopkins University", *Industry and Innovation,* Vol. 10, No. 1, pp. 5-24.

Fontes, M. and R. Coombs (2001), "Contribution of New Technology Based Firms to the Strengthening of Technological Capabilities in Intermediate Economies", *Research Policy,* Vol. 30, pp. 79-97.

Garlick, S. *et al.* (2006), "Twente in the Netherlands", *Supporting the Contribution of Higher Education Institutions to Regional Development*, *Peer Review Report*, OECD/IMHE, Paris.

Gibbons, M. *et al.* (1994), "The New Production of Knowledge", Sage, London.

Goddard, J., P. Benneworth and H. Pickering (2006), "Reviewing the Regional Role of Universities", report to the UK Department for Education and Skills, Knowledge House, Sunderland.

Goddard, J.B. and P. Chatterton (2003), "The Response of Universities to Regional Needs", in F. Boekema, E. Kuypers and R. Rutten (eds.), *Economic Geography of Higher Education: Knowledge, Infrastructure and Learning Regions*, Routledge, London.

Goddard, J. *et al.* (1994), "Universities and Communities", Committee of Vice-Chancellors and Principals, London.

Gunasekara, C. (2006a), "Reframing the Role of Universities in the Development of Regional Innovation Systems", *Journal of Technology Transfer,* Vol. 31, No. 1, pp. 101-111.

Gunasekara, C. (2006b), Universities and Associative Regional Governance: Australian Evidence in Non-core Metropolitan Regions, *Regional Studies,* Vol. 40, No. 7, pp. 727-741.

HEFCE (n.d.), Higher Education Innovation Fund website, *www.hefce.ac.uk/reachout/heif*.

HEFCE (2006), Higher Education Innovation Fund: Summary Evaluation of First Round (2001-05), HEFCE, Bristol.

HM Treasury (2001), Productivity in the UK: 3 – The Regional Dimension, HM Treasury, London.

HM Treasury (2003a), Productivity in the UK: 4 – The Local Dimension, HM Treasury, London.

HM Treasury (2003b), Lambert Review of Business-University Collaboration: Final Report, HM Treasury, London.

HM Treasury (2006), Productivity in the UK: 6 – Progress and New Evidence, HM Treasury, London.

HM Treasury, Department for Business, Enterprise and Regulatory Reform (DBERR), and Communities and Local Government (DCLG) (2007), *Review of Sub-national Economic Development and Regeneration*, HM Treasury, DBERR and DCLG, London.

Knowledge House (2006), *Strategic Future – Beyond 2006*, unpublished mimeo.

Loebl, H. (2001), *Outside In*, Fen Drayton, Gosforth.

Muller, E. and A. Zenker (2001), "Business Services as Actors of Knowledge Transformation: The Role of KIBS in Regional and National Innovation Systems", *Research Policy,* Vol. 30, No. 9, pp. 1501-1516.

NCIHE (National Committee of Inquiry on Higher Education) (1997), *Higher Education in the Learning Society*, NCIHE, London.

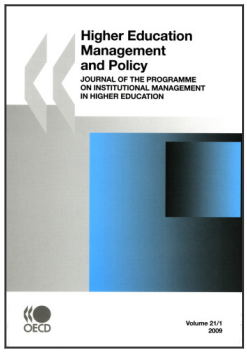
NESTA (National Endowment for Science, Technology and the Arts) (2007), *Leading Innovation: Building Effective Regional Coalitions for Innovation*, NESTA, London.

OECD (2009), *Piemonte: A Regional Innovation Review*, OECD, Paris.

Robson, B., K. Drake and I. Deas (1997), *Higher Education and Regions*, Report for the National Committee of Inquiry into Higher Education (Sir Ron Dearing, Chairman), NCIHE, Leeds.

SHEFC (Scottish Higher Education Funding Council) and SEC (Scottish Enterprise) (2002), "Research and Knowledge Transfer in Scotland", Report of the Scottish Higher Education Funding Council and Scottish Enterprise Joint Task Group, SHEFC and SE, Edinburgh.

Temple, J. (1998), "The New Growth Evidence", *Journal of Economic Literature,* Vol. 37, No. 1, pp. 112-156.



From:
Higher Education Management and Policy

Access the journal at:
https://doi.org/10.1787/17269822

Please cite this article as:

Benneworth, Paul and Alan Sanderson (2009), "The regional engagement of universities: Building capacity in a sparse innovation environment", *Higher Education Management and Policy*, Vol. 21/1.

DOI: https://doi.org/10.1787/hemp-v21-art8-en