NESTA Making Innovation Flourish

Reinventing the Civic University

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Summary

In the context of a severe recession, pressure on the public finances and major societal challenges such as global warming and the ageing population Governments are quite properly asking: what are universities for?

In this provocation I argue that all publicly-funded universities in the UK have a civic duty to engage with wider society on the local, national and global scales, and to do so in a manner which links the social to the economic spheres. Engagement has to be an institution wide-commitment, not confined to individual academics or projects. It has to embrace teaching as well as research, students as well as academics, and the full range of support services. All universities need to develop strategies to guide their engagement with wider society, to manage themselves accordingly and to work with external partners to gauge their success.

While the academy is engaged with society in all manner of ways, now is the time for a comprehensive response from universities and the higher education system as a whole to the future needs of all parts of the UK.

In responding to this challenge it is crucial that university leaders introduce an institution-wide strategy for civic engagement, a strategy that reaches across teaching and research rather than being boxed off as a third stream of activity. To support Vice-Chancellors in this, the funding system has to reflect and incentivise engagement. We know from many precedents that changes to the funding regime are the most direct way of altering the way universities behave. This should not happen at the level of the individual project. It should be done in ways that reward universities that can demonstrate that institution-wide mechanisms are in place to deliver societal impact. Under this proposal, Vice-Chancellors would be responsible for managing a portfolio of research and teaching activities ranging from those that have direct and immediate societal effects through to those that may have long term or indirect impact.

For their part, the Funding and Research Councils should play a major role by ensuring that the UK has a higher education system responsive to the needs of all parts of the country and which contributes to fulfilling the nation's international obligations.

This proposal finds a parallel in the tradition of US land-grant institutions, which have at their constitutional core a duty to develop the communities in which they reside, both socially and economically. More significantly, it harks back to the great British tradition of civic universities which lies behind the foundation of a host of leading UK higher education institutions.

The engaged civic university which I propose is one which provides opportunities for the society of which it forms part. It engages as a whole with its surroundings, not piecemeal; it partners with other universities and colleges; and it is managed in a way that ensures it participates fully in the region of which it forms part. While it operates on a global scale, it realises that its location helps form its identity and provides opportunities for it to grow and help others, including individual learners, businesses and public institutions, to do so too. The example which I describe of Newcastle University, my own institution, illustrates how this university was able to re-discover its roots in the economic, social and built environment of a city, establish partnerships with other universities, the City Council and the Regional Development Agency, and re-engineer its internal management processes to re-establish Newcastle as 'city of science' where academic excellence in teaching and research go hand in hand with practical application of that knowledge.

I argue that civic engagement should move beyond being a third or separate strand of activity for universities, with less prestige and fewer resources than teaching or research. It should become a guiding principle for their organisation and practice. This does not imply that all universities should have the same mission: universities have different abilities to work at local, national and international levels, all of which are valuable. The evolution of networks of universities matched to the needs and opportunities of each part of the country will help meet the needs of the nation as a whole. The alternative is reduced social, economic and cultural development for the various regions of the UK, and the prospect of the UK's universities becoming less influential and important both locally and globally.

Reinventing the civic university

Introduction

The current recession has raised fundamental questions about the fitness for purpose of many UK institutions to meet the challenges we face in the 21st Century, not least the universities. Many of our great universities were created in the 19th Century to meet the needs of growing cities. Local entrepreneurs and civic leaders responded to the needs for scientific knowledge and a healthy and skilled workforce by founding universities to underpin the economic success of the cities in the nation's heartland. During the second half of the 20th Century, central government took increased control of higher education, cities de-industrialised, and many of these earlier foundations turned their backs on the cities in which they were based. Increased public funding for research followed narrowly-defined academic success, and higher education was rolled out across the nation to fill in the map of teaching and learning with a diverse set of institutions. Now nearly all cities have one or more universities. But, and it's a very big but, we have lost sight of the key purposes for which universities exist during the course of this expansion.

In this provocation I argue that now is the time to re-invent the notion of the broadly based civic university that served the country so successfully during the 19th century. But this time, their rediscovery should be set in the context of a much more globalised economy and

society. These civic universities should be strongly connected to people and to place. They should be committed to generating prosperity and well being and to balancing economic and cultural values. Now we have a national system of higher education, civic engagement should not just be a matter for the long-established foundations to consider, but for all universities.

In this Provocation I shall examine why civic engagement is on the public agenda now, the contribution that universities can make to business and societal innovation, the power of a city or geographical perspective in linking teaching and research to societal needs and opportunities, and the scope for the university to integrate hitherto separate domains of public policy. I shall also examine the challenge of assessing impact and managing the civic university. A case study of my University's re-discovery of its own roots serves to illustrate the general principles, and reminds us that responding to the challenges of civic engagement is highly contingent on the history of particular universities and cities. I conclude by suggesting that this reinvention points to the need for a reappraisal of aspects of the university funding model. This model has rewarded research excellence with little regard to its impact, and it has followed student demand rather than demand from local or national labour markets.

Why this provocation now?

John Denham, until recently Secretary of State for Innovation, Universities and Skills, sought to provoke a debate on the future shape of a "world class higher education system". This debate is taking place in a specific context, the possible lifting of the cap on the fees which universities can charge UK undergraduate students. But his speech in February 2008 suggested that he takes a wide view of what universities are for. He asks them to go beyond the already demanding task of delivering higher-quality research and teaching. He called for them to: "lay the foundations for further knowledge and wealth," "(be) a vital element in the development of communities and regions," "(be) integral to our national culture and a cohesive society (and) nurture the shared values that bind us together," and "(ensure that) the financial benefits (of intellectual property) flow through the economy (and) bring about the wider diffusion of knowledge across the country".[1]

Lord Mandelson, Secretary for State for Business, Innovation and Skills and now responsible for universities has maintained this commitment to the broader role of universities stating that: "Nobody would disagree that our universities and colleges are as much about the bedrock of our society as the competitiveness of the economy…The mission of the new department is to build Britain's competitiveness directly but also indirectly by reinforcing our cultural awareness, confidence and sense of our past and future. Character and competetiveness

are not mutually exclusive…Higher and further education underwrite them both by enabling people to make the most of their talents and their lives".[2]

This is not a new agenda. The former Chief Executive of HEFCE, David Eastwood, now Vice Chancellor of the great civic University of Birmingham reminds us that: " The vision of the founders of much of our higher education system, who sought to enable 'the advancement of learning and the ennoblement of life', still provides us with a significant challenge today. These are aspirations which are enshrined in the charters of universities in many of our towns and cities and provide us with a benchmark for assessing the extent to which today's institutions match these ideals. These founders were particularly interested in universities' civilising influences and how they could boost economies and transform people within their communities and beyond" In this statement David Eastwood is clearly signalling that civic engagement is not just a matter for newer institutions, but also for the research-intensive universities that have evolved from these earlier foundations.[3]

His successor at HEFCE, Sir Alan Langlands, has said that "it is possible to combine the fundamental truths of education and research with the knowledge and skills to help the professions, business and public services innovate and prosper and to ensure research undertaken in universities continues to have relevance and impact".[4]

The Science Minister, Lord Drayson, has joined in the discussion in the context of the proposals about the future Research Excellence Framework(REF). He has stated that "scientists have a duty – particularly when they are funded by the taxpayer – to engage in the public arena, to engage in communication of the challenges and the potential ethical concerns about their science, and that will be included in the REF".[5]

Following the Secretary for State's speech, DIUS (as it then was) commissioned a number of studies to inform the debate on the future of higher education, in advance of an anticipated debate and decision on lifting the cap on UK student fees. They are listed in Box 1. None address the broader civic role of the university – it's as if these more fundamental questions were put into the 'too difficult' box. However the onset of recession, severe constraints in the public finances and ongoing debates about public governance do raise key questions such as: what are universities for? And what range and type of universities do we need and where?

What are universities For?

The answer to this question is partly a matter of making universities more effective parts of society. But it is also to do with openness and the accountability of the academy to society for the public funds it receives. In a wide-ranging review of "universities and the public good," Craig Calhoun has suggested that while knowledge may be generated in the public interest, it is not necessarily widely circulated. Indeed, excellence in the academy is often equated with exclusivity. While real knowledge may "eventually" be for the good of humanity as a whole,

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Box 1: The papers commissioned to inform the Higher Education Framework Review

- International issues in HE

- Academia and public policy making

- Understanding HE institutional performance

- Part-time studies and HE

- Teaching and the student experience

- Research careers

- Demographic challenge facing our universities

- Intellectual property and research benefits

- World leader in e-learning

benefits "unequally trickle down." The rewards for research are tied up with the production of academic hierarchy and the relative standing of institutions. On the other hand, Calhoun argues that "public support for universities is based on the effort to educate citizens in general, to share knowledge and to produce it in accord with publically articulated purposes… including economic development which requires technical expertise and the general education of participants."

Debate about the public value of the UK higher education system can get caught in a false dichotomy between research excellence, elite versus mass teaching and the hierarchy of institutions on the one hand, and the need for education and new knowledge to be accessible on the other. If universities accept their role as one of a range of knowledge providers, along with government, business, the non-profit sector, individuals and others, this dichotomy becomes less important and the broad role of all universities in civil society becomes more apparent.

This view chimes with important trends in current academic thought. For example, it has important resonances with Gerard Delanty's treatise on 'The University in the Knowledge Society,' where he discusses the "intrusion of civil society into the university." This is a much broader perspective than the "new production of knowledge" thesis of Gibbons and others,[6] or the Bruegel Blueprint for reforming European Universities.[7] Delanty argues that "the great significance of the university is that it can be the most important site of connectivity in the knowledge society (and) a key institution for the formation of cultural and technological citizenship (and for) reversing the decline of the public sphere".[8] While this is a global agenda, facilitated by the diffusion of knowledge made possible by today's communications technology, public discourse is also local. It is rooted in the day to day experience of employers and individual citizens, including universities and the people in them. So we have to set the question of what universities are for in the context of the territorial development of the country. What contributions are universities in the round making to the economic, social and cultural development of their respective communities? Is this contribution one that meets national as well as local aspirations for a united kingdom?

Systemic innovation and the Civic University

Innovation in business, in public services and in the way society is organised is fundamental to the future success of the UK overall and of its component regions and cities. This means that we must view innovation in the round, not merely as a process in which academic research leads to saleable products. An earlier NESTA provocation by Fred Steward[9] has drawn attention to the importance of "transformative innovations", such as the creation of the welfare state or the internet, more of which are now needed to tackle the challenges of global environmental change. Universities are vital to this process but are only one of the participants in it.

The civic university has a key role to play in fostering such system wide innovation and tackling the big challenges that confront the modern world, for example the need for sustainable cities or the many challenges and opportunities that arise from an ageing population. It can do this by serving public as well as private interests and embracing business and the community found outside its front door, connecting these communities to the global arena.

In relation to business, NESTA has already coined the term 'The Connected University' in its report on the role of universities in driving growth in the UK economy. For NESTA the Connected University:

• Recognises the importance of building networks with local firms, nurturing local clusters, creates national and international connections, and puts all this at the hearty of its strategy.

• Recruits, develops and promotes more 'boundary spanners': people whose experience encompasses both public and private sectors and who can build links between them.

• Measures the benefits of university-business interaction more effectively and communicates this to the public,

Here I argue that wide ranging civic engagement that connects the university not only to business but the wider milieu within which business operates is necessary to realise the full economic development potential of the connected university.

Bringing it all together: the power of geography

In the domain of economic development, academic thinking has moved on from a narrow linear model in which ideas start in the university and are transmitted to the market. It embraces ideas about the co-production of knowledge. Research councils are emphasising the need for the projects and programmes they fund to ensure economic impact.

Despite this welcome change, an underlying logic of science and technology "push" still underpins the UK's national innovation policy. It is certainly tempting to think of humming university laboratories producing new devices or processes which will power future economic growth, despite much evidence that innovation is rarely this simple. But at the sub-national scale, including in the North East where I am based and which I know most about, much more realistic and network-based approaches to innovation are common. Regional Development Agencies, Local Authorities and a wide range of partnership organisations are becoming involved in a more broadly-based and thoughtful innovation agenda. At this level, geography is a powerful heuristic for bringing together all the domains relevant to total innovation, and in the process is revealing the potential of universities as key integrating institutions. This geographical perspective acknowledges that innovation in the broadest sense requires systemic changes

in behaviour on the part of individuals and organisations and that these occur in specific local settings. Local agencies provide space, finance and other forms of support for innovation. The UK's national innovative performance is the sum of these local changes.

Universities can contribute to this local innovative performance in several ways. Research-based knowledge exchange, particularly to SMEs, is perhaps the most familiar. Equally important are 'knowledge transfer on legs' through work-based learning and higher-level skills enhancement, and engagement with civil society through cultural activities and community-based initiatives, to promote the adoption of social innovations. Just as innovation in business and wider society requires the translation of new knowledge into new working practices, so the effective mobilisation of higher education can require the linking of research-based knowledge into skills in the workplace or society at large.

This perspective does not imply that relationships between a university and its locality should be a closed system. Universities engage with a wide range of national endeavours including those relating to industry, health, the environment and culture. They have the potential to integrate these domains with local business and to societal needs and opportunities. This integration can occur on specific sites such as a university campus or hospital, a science park or a cultural quarter, thereby contributing to a sense of place. By definition, universities also operate on a world scale and can

bridge the local and the global. They can attract overseas staff, students and investors and integrate their influences into indigenous businesses and the community.

Just as the university can help to create an innovative local society, so too can that society contribute to a university's own aspirations. They can help it meet its ambitions in areas such as student recruitment, with enrolments from the local population, additional income from services to local business through consultancy and professional updating, and the indirect benefits of a local environment that can attract and retain creative academics and motivated students. More subtly, local civic engagement can be an outward and visible sign of the contribution of the university to the wider society. In response to these opportunities the OECD has observed that across its member states, universities and cities and regions 'are discovering each other'.[10]

Figure 1 from the OECD report seek to summarise this multi level and multi-modal civic engagement agenda. It suggests that at the local-level research can contribute to business innovation, and teaching to the development of higher-level skills. This may include professional updating resulting from research-driven innovation relating to products or processes. Both teaching and research can contribute to cultural industries and cultural identity, and to more inclusive communities. But this requires careful integration of the three

Figure 1: The regionally engaged multi-modal and multi-scalar university
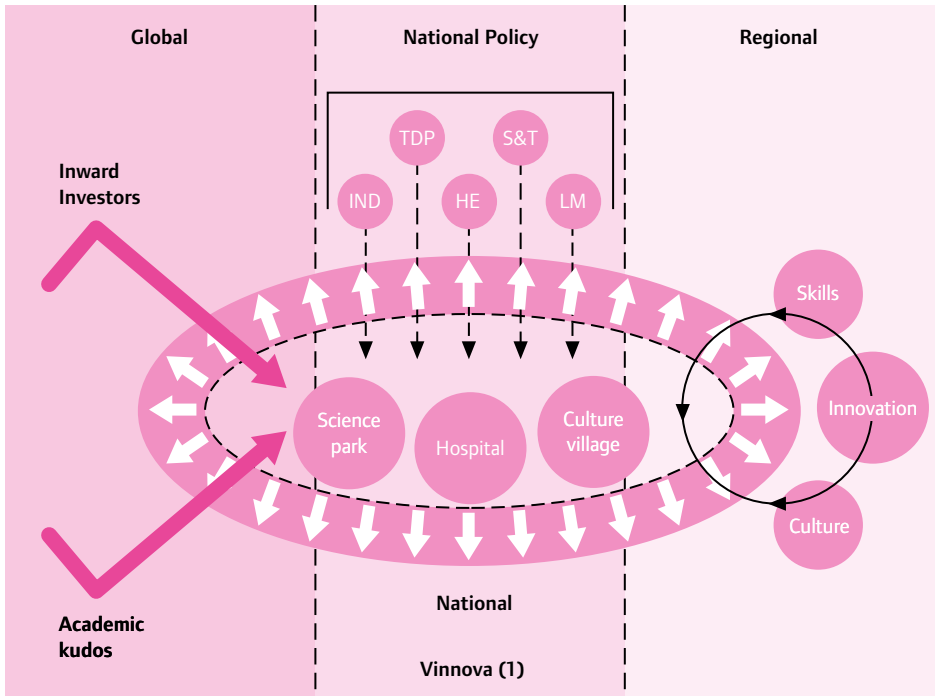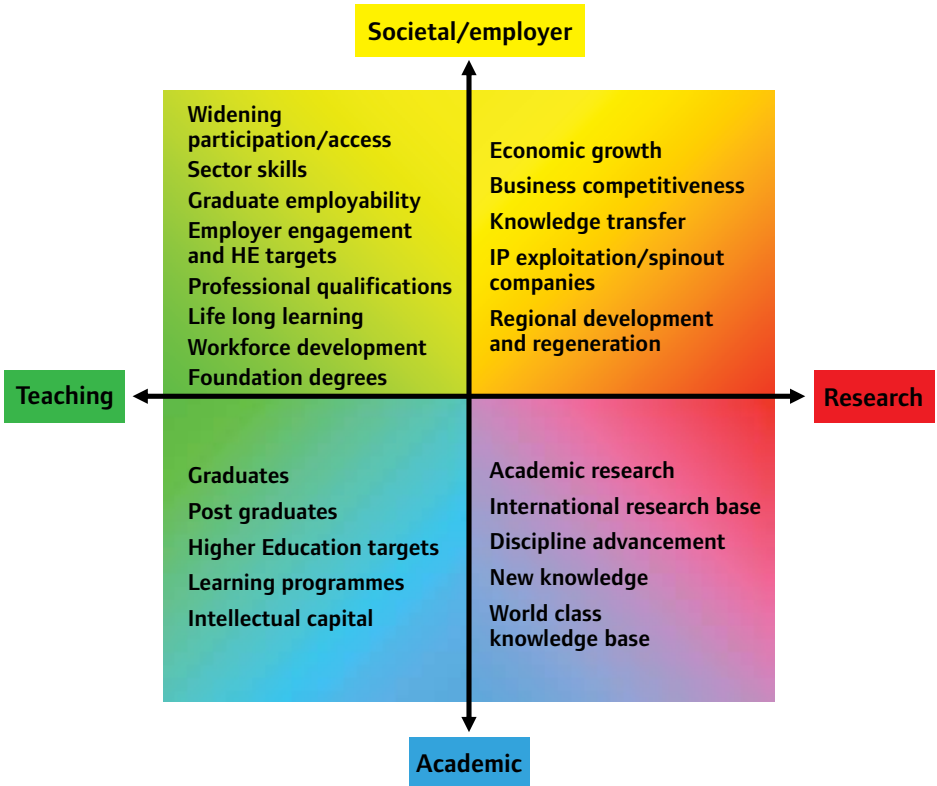

strands of academic activity as shown by the circle with arrows in the diagram.

At the national level, the Civic University can contribute to the agendas of a wide range of central government departments and has the potential to 'join up' national 'silos' at the local level, in such domains as industrial development (IND), territorial development, including local/ regional government (TDP), technological innovation(S&T), and labour market development and skills enhancement (LM). Finally at the international level, the globally competitive and locally engaged civic university can contribute to attracting inward investing companies to specific locations, provide local business with worldwide connections and attract the mobile elite or what Saxenian calls the 'new Argonauts' to an area thereby adding to its cultural diversity and pool of entrepreneurial talent.[11] In addition to the passive impact locally and nationally

Figure 2: Some agendas / expectations of Higher Education

Societal/employer

Widening participation/access
Sector skills
Graduate employability
Employer engagement and HE targets
Professional qualifications
Life long learning
Workforce development
Foundation degrees

Economic growth
Business competitiveness
Knowledge transfer
IP exploitation/spinout companies
Regional development and regeneration

Teaching — Research

Graduates
Post graduates
Higher Education targets
Learning programmes
Intellectual capital

Academic research
International research base
Discipline advancement
New knowledge
World class knowledge base

Academic

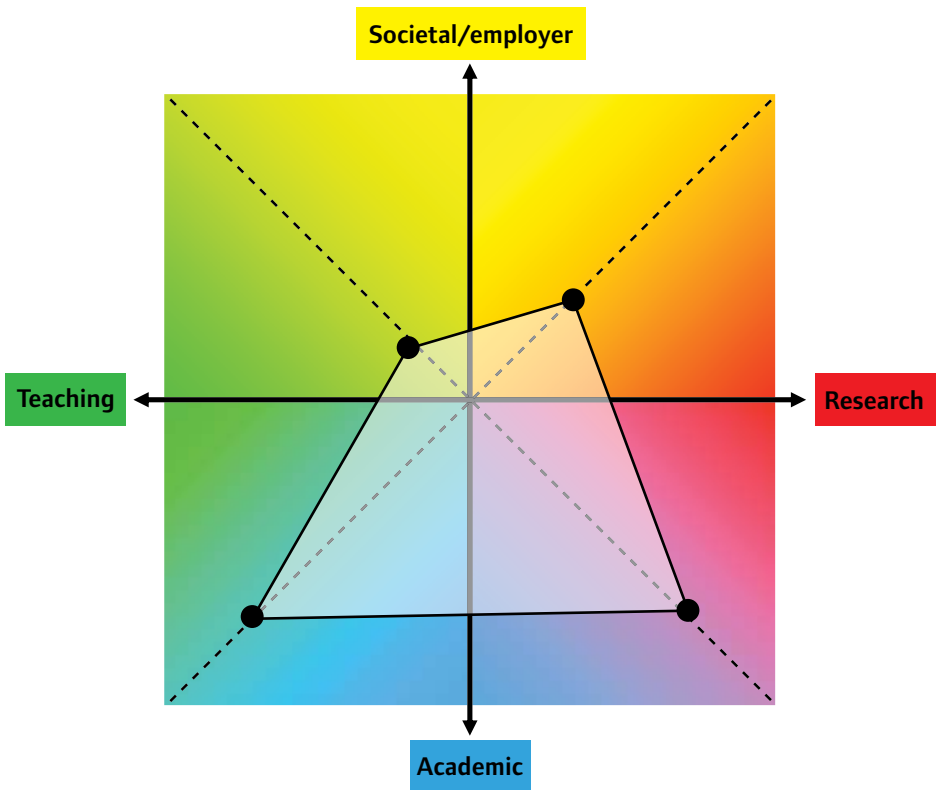**Source:** Dr M. Wedgwood, Manchester Metropolitan University

of the university as a major business (shown by open arrows in the diagram), many of the key dynamic impacts arise in specific locations such as a science park, university hospital or cultural village.

What does this model imply for the management and positioning of a university? Traditional views of a university set curiosity-driven research and its translation into teaching against skills enhancement based on knowledge transfer. Figure 2 suggests the source of activities that might be undertaken in each of these quadrants. Each of these activities can have different drivers, such as the RAE for purely academic research, and business income for consultancy and CPD.

Figures 3 and 4 indicate where a Russell Group or a new university respectively might seek to position themselves across the four quadrants.

**Figure 3:** A UK Research intensive University?

Figure 5 would represent a mixed-mode or civic university following the principles illustrated in Figure 1 of a globally competitive and locally engaged institution.

Assessing the impact of the Civic University

How should the civic engagement agenda that I have outlined be publicly funded? A university's engagement with the outside world will be impeded by attempts to use a beguilingly simple business model to tie down all the intellectual property that is used. An obvious example is the emphasis on patenting universities' intellectual property. The vast majority of new knowledge that a university generates is not appropriate for patenting. Instead we need new ways to measure what a university returns to the community of which it forms part, most of which is not

Figure 4: A Post 1992 University?

Societal/employer

Teaching ← → Research
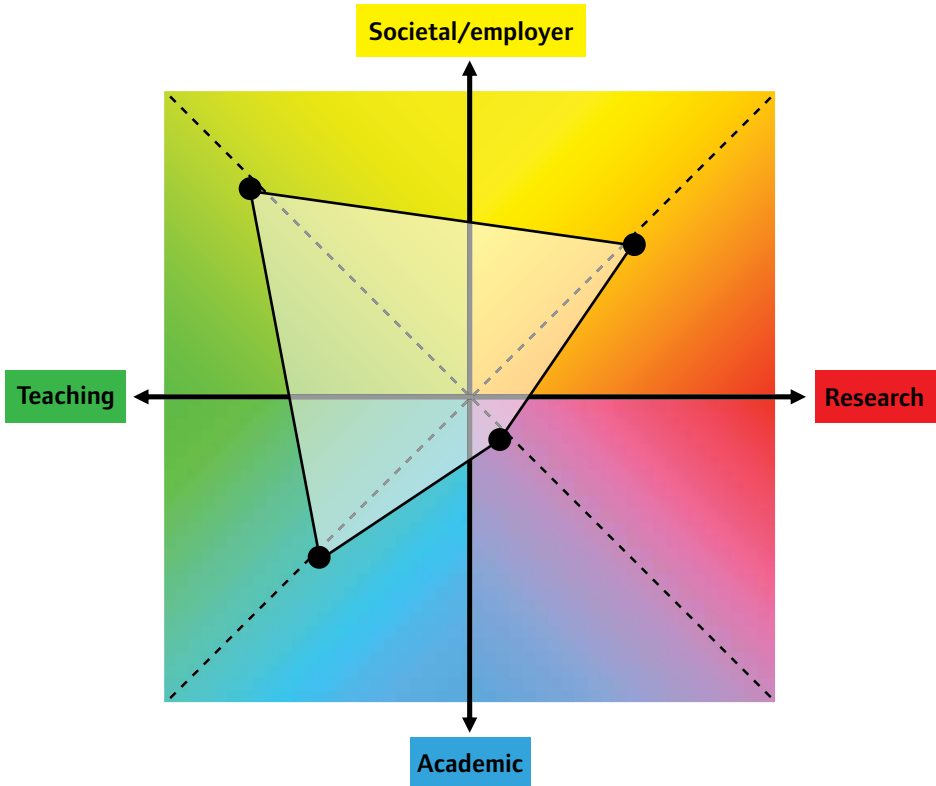
Academic

direct, commercial or financial and cannot be regarded as "technology transfer."

One approach might be to use external non-academic review, asking questions such as whether the university has delivered what the wider society needs, whether the mechanisms for engagement are in place and how simple it was to deal with. Finland already has something like this in the form of developmental peer reviews commissioned by it Higher Education Evaluation Council and adopted by the OECD, as shown in Box 2.[12] The Finnish and OECD approach involves a written self assessment commissioned by all universities and their civic partners prepared using a standard template and covering the impact of the universities on economic, social , cultural and environmental development. This is followed by a peer review by a team of national and international experts. The peer review is published and subject to

Figure 5: A Mixed Economy University
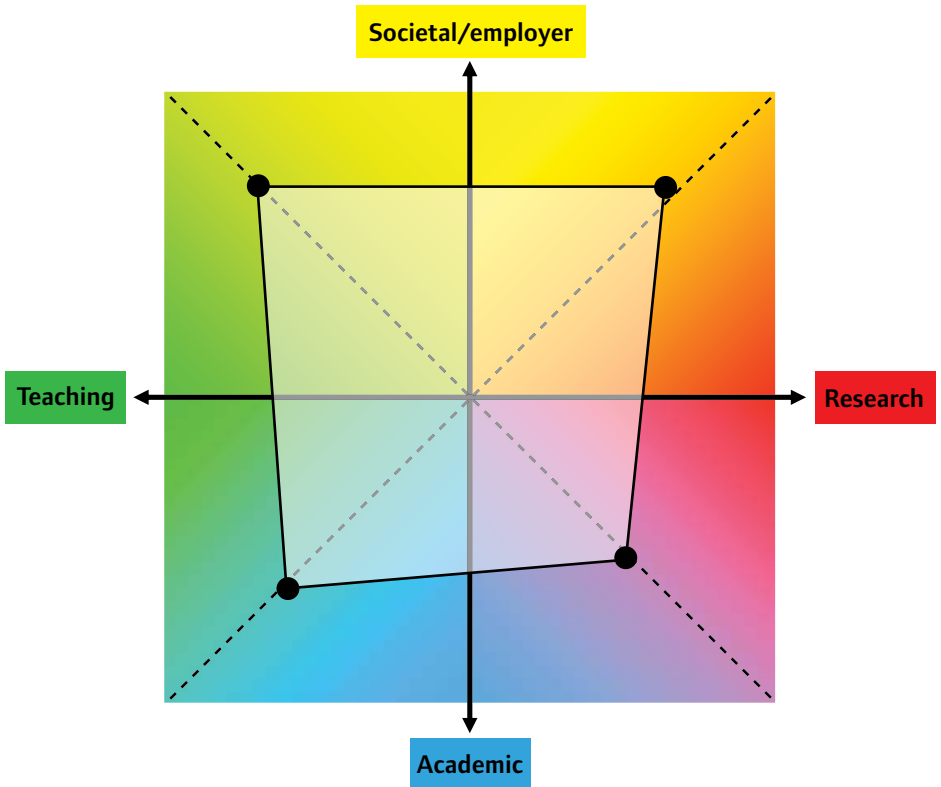
Source: Dr M. Wedgwood, Manchester Metropolitan University

open debate and may be followed up to assess progress against agreed actions. Such a way of measuring what universities do in their local and wider context and building capacity for engagement both within the university and the wider community might help UK universities avoid damaging public accusations that they inhabit the 'Ivory Tower'.

Discussion of the wider value of universities should not be seen in isolation. There are analogous debates in society about the value of spending on the arts, or on public service broadcasting. Such discussions tend to reveal that both elites and the wider public place a high value on these uses of public resources.

Much anecdotal evidence suggests that academics want their work to have an impact and contribute to the public good. They choose to work in the academy despite its poor financial rewards because

of the effect they can have, whether in social impact or via teaching or the production of new knowledge.

One problem is that academics rarely consider their influence on the outside world in the way that governments or university managers do. These latter tend to measure impact on a strictly economic definition, and rarely look at qualitative measures such as improvements in the way a public service is provided. So we need better ways of celebrating such impact, and a better realisation that external links enhance scholarship and are not a problem for academic autonomy. The 2008 Research Assessment Exercise used criteria such as the research environment and indicators of research esteem alongside publications and citations in its analysis. It is to be hoped that the future Research Excellence Framework will take account of the extent to which research is having an impact, particularly bearing in mind the comments

of the Science Minster quoted earlier and that 'impact' goes beyond evidence about the communication of science to the general public, important as this is.

One problem is that much of the academic literature on universities and their interaction with the outside world, and which informs policy and practice, comes from the perspective of science policy. It stresses getting research directly into business use. Even within the domain of interaction with business, the focus is on research links. It ignores the influence of teaching on skills, knowledge transfer 'on legs' and community engagement on the environment in which business operates. At the same time the regional development literature tends to see universities as a black box and does not regard them, or their links to other players, as an issue of interest.

One advantage of measuring progress in university impact in qualitative

terms is that quantitative measures such as financial returns are inherently backward-looking or 'lagging' indicators.[13] Qualitative measures such as contributions to public service or the building of community links are forward-looking or 'leading' indicators and point towards future achievement. Gaps in these areas point to possible neglected opportunities. Commercially successful university links require businesses which have the capacity to interact with an academic institution. Regions and nations vary in their capacity to do this. This means that universities need to work with partners in building their capacity to reach into higher education.

Public funding for a national system of Civic Universities

Public funding has a direct influence on how universities behave. The priority they place on civic engagement relative to other priorities is no exception. The funding models now used by the funding and research councils drive universities in important and unhelpful ways in terms of the civic engagement agenda.

UK universities are autonomous bodies which are free to undertake a steep increase in their civic engagement. Most choose not to, because there is no direct reward for doing so. Part of the reason is that the Research Assessment Exercise, even in the more thoughtful form in which it was applied in 2008, still incentivises other priorities, as does the National Student Satisfaction Survey, the currently-used measure of teaching and other aspects of the student experience.

Funding for teaching is not targeted at skill shortages arising from the application of research. Nor is it driven by any national innovation agenda. Universities are not encouraged to change in ways that maximise their civic engagement. The university system in England has been allowed to expand chiefly to meet undergraduate demand in unserved areas, but the system has not been driven in a specific direction. The distinction between institutions that are more academic or more applied, or that are more focused on teaching or on research, has grown up rather than being thought through.

The Scottish system, by contrast, is now being driven with much more deliberate intention. Elsewhere, for example in Catalonia in Spain, a diverse set of institutions have joined forces to build a unified higher education system from the bottom up. In Australia the Braddely review has raised the possibility of a single network of regional universities,[14] while in the United States the Kellogg Commission has re-asserted the importance of the Land Grant Universities, and these universities have come together to emphasise their role as Stewards of Place.[15]

Here in the UK, we have a number of types of university. But their high level of autonomy and their range of governing bodies mean that it is hard to achieve thoughtful change in the system overall. We need to ask whether the present hierarchy, with teaching-led universities below the research-intensive ones in esteem, provides the best return for British society. The Secretary of State's

reflections on the outcome of the RAE that "I am minded to conclude that we do need a significant concentration of research activity (and) I don't see the future as a step by step dilution (or) spread of research activity" is not a particularly helpful response in the light of his call for a broad debate on the position and role of universities. We need to appreciate that having some world-class universities is not the same thing as having a world-class university system that forms part of a healthy society. While we now have a widespread distribution of higher education provision across the UK, this teaching needs to be underpinned by research that can contribute to local innovation in business, public services and the wider community.

Many older civic universities have a focus on research, and can tend to regard public engagement as a mission for newer, teaching-centred institutions. But at Newcastle, we have taken the view that engagement is a differentiating factor that allows us to distinguish ourselves within the Russell group of research-intensive universities. As well as being good for the university overall, it helps attract a growing cadre of academics and students committed to the public good, and makes our graduates more attractive to employers, who want more socially-aware students. And yes, it does bring in money, from the Regional Development Agency and other sources. In our case, civic engagement has been a good way to emphasise the complementarity of Newcastle to our neighbour in Durham.

This makes a more general point, namely that the North East has a genuine sub-national higher education system in which five universities – Durham, Newcastle, Northumbria, Sunderland and Teesside – have distinctive roles but have developed ways of working together over time. This has proven a more politically and educationally acceptable way of co-operating than mergers designed to reduce the number of institutions. Other participants such as further education colleges also have key roles in this system. The region's universities of course still compete with each other, for example for students and as providers of lifelong learning opportunities and CPD.

Such a sub-national system which involves collaboration and competition may be difficult to create everywhere. The problems are least in a region such as the North East which is not too large or too complex and where a set of complementary institutions well matched to the local geography has emerged. Elsewhere it may be more sensible to focus on universities and individual cities in the development of sub-national higher education systems.

The cooperation in the North East has been developed by the universities themselves with encouragement from local government and other actors in the region. However, it is more difficult to achieve in English regions than it is in Wales or Scotland. Each of these has a national funding council which is acting increasingly as a steering body. From the perspective of the civic university agenda it is unfortunate that the Higher

Education Funding Council for England is not empowered or organised in a way that allows it to incentivise groups of universities in a way that maximises the contribution they are making to the region of which they form part.

This is not to belittle the many small initiatives on civic engagement which HEFCE has supported. Many are successes insofar as they demonstrate that a new idea or approach is feasible. But HEFCE lacks mechanisms to generalise such localised success by reorienting its models to support civic engagement as a principal university mission. This would be demanding for HEFCE but the civic university agenda, and the current pressure on university finances, make the case for such a reorientation stronger.

The research councils are the other principal supporters of UK universities. Most of the funds they invest go into a limited number of research-intensive universities. Their main ways of working are to support individual projects and programmes at specific universities. The research councils are increasingly concerned to ensure these projects have an impact on wider society. But they lack means of ensuring that the universities in which they support research have mechanisms in place to facilitate this process, for example the translation of research into practice via teaching and learning, or by working through partnerships with intermediary bodies such as regional development agencies. The research councils support some inter-institutional and interdisciplinary work, but have no responsibility for economic

development or to reward success in this activity in particular parts of the country

This is not a criticism of the funding and research councils alone. To be successful civic institutions, universities need people and organisations in their area to interact with them. For example, businesses can find it difficult and daunting to interact with a university, just as university staff can find the private sector hard to navigate. In a climate where any recipients of public funds are certain to be assessed on the efficiency with which they are spent, this means new demands.

Increased civic involvement will call on universities, regional organisations, and the funding bodies which support higher education to devise new ways of measuring the impact of this engagement. The impact of research is already assessed across many fronts, from its effect on policy to its industrial take-up. New measures of engagement and its impact will allow civic activity to be recognised and rewarded, making it more of a priority for universities.

A similar point applies at the level of UK national government. Universities relate politically to the ministry which sponsors them, at the moment BIS. But their work also affects a wide range of other government departments. Obvious examples are industry and the economy, local government, health, culture and sport, foreign relations and international development, energy and climate change, and of course school and college-level education. This means that BIS needs a strong cross-Whitehall system for its

dealings with universities, in which a full range of departments can benefit from the new knowledge universities generate, the people they educate and the connections they make, whether local or global. The present poorly integrated system wastes opportunities for both universities and government.

The role of intermediaries

One of the challenges of civic engagement is who represents the external stakeholders particularly disparate groups like small and medium sized enterprises and the community and voluntary sectors. Chris Brink, vice chancellor of my own institution, Newcastle University, chose to devote his inaugural lecture to asking "What is the University for?".[16] One of the issues he raised was the expectations which universities might have of their non-university partners. The professions such as medicine, the law and engineering have well-developed ways of influencing university teaching and research. Companies usually do not. The representative bodies to which they often belong often have only limited ability to articulate their needs. This creates a need for more intermediary bodies to bridge the gap between universities and the public and private sectors. For example, Science Parks have increasingly gone beyond their original remit as niche property developers to become coordinating influences between research and business. At the level of coordinating policy thinking in imaginative but very different ways, NESTA, publishers of this report, and Foresight, part of the

Government Office of Scidnce, have emerged as important ways for academic ideas to enter the policy arena.

This Provocation is not intended only to persuade universities to change. It suggests new ways of working for government at all levels, for business and the non-profit sector, and for other actors in society. These bodies all need capacity to deal more effectively with universities.

Some of the most interesting issues affect local government. Like universities, local government is an integrating organisation whose concerns span the whole of society. Its diversity and complexity also match those found in a university. The challenge is to build bridges between local government and other territorially-based public sector organisations and universities over which real traffic can pass. It is common for senior figures in universities and public bodies to sign important-looking collaborative agreements which have little effect at the operational level. Universities need to move beyond this to produce agreements which lead to genuine day-to-day exchanges taking place. This is hard, slow work.

Leading and managing the Civic University

From medicine to music, many university disciplines have distinctive ways of addressing the outside world, including business, government and the public. But how a university as a whole engages with the wider society is an issue that

rarely figures in discussions of university management or strategic positioning.

It is easy to understand why universities are managed as they are. It is simpler to manage a hierarchy of deans and heads of discipline-based departments than it is to oversee a matrix that integrates teaching and research across disciplines and support services in a way that can respond to external needs. Many universities now have pro-vice chancellors with external engagement portfolios, but most have limited influence over the discipline-based financial silos.

But society is entitled to ask how a university's disciplinary teaching and research as a whole fit into its surroundings. Answering this question calls for the appropriate leadership and management structure for the university. At the moment, some universities are organised in a way that allows other participants in society, perhaps business or the media, to interact with them selectively, but not to engage with the institution at large. One effect of this lack of overall identity is that universities have little defence against global pressures which are hollowing out their skills. University leaders should seek to assert the role of their university as a civic institution alongside other bodies in society, and work to counteract the many disintegrating pressures on them.

Many studies such as one from the Council for Industry and Higher Education suggest that academics regard their external contacts as personal assets, which they are reluctant to reveal to

others even within their own institution.[17] They may fear that university managers will damage their valued relationships by excessive bureaucracy. This means that universities need to work towards a better culture of knowledge-sharing, rewarding as well as acknowledging its importance.

Eatablishing procedures to recognise and reward staff contributing to the institution's civic engagement agenda is a key task for institutional leaders. It can be argued that while recognition of academic achievement in terms of research and teaching is relatively straightforward, for example as reflected in publications and citations and student surveys, engagement is a far less transparent activity, especially if as I have argued for here it is embedded within teaching and research. But just as academic impact can be assessed by peer review, societal impact can be assessed by carefully selected stakeholders.

None of this easy. It requires institutional leadership. It is sometimes said that changing a university is like moving a cemetery. You get the same amount of help from the occupants in both cases. But change such as I am suggesting is often driven by the enthusiasm of key individuals who assume a leadership role. All the research on major commercial development centred on universities, such as Route 128 near MIT, or indeed Silicon Valley, confirms this.

The problem is to agree on what this finding is telling us. It can be used to claim that this sort of development cannot be planned or reproduced, and

must simply wait for the right person to come along and make it happen. I am currently working with the Leadership Foundation in Higher Education in scoping a development programme for university and civic leaders. This is suggesting that good experience in university engagement can be codified and taught. It involves knowledge of both what to do and how to do it: leadership skills, and knowledge of how to work with and through other people. If universities are to work with civic partners, both will need boundary-spanning skills. These skills need to be developed at all levels within all partnering organisations.

The know-what and know-how of civic engagement are also something for the student body. The challenge which civil society faces needs fundamental thinking about technology, regulation, the role of the state and other complex topics. This means producing graduates with the right skills but also the right values. Part of the task of a university is to educate people with the social as well as the technical capacity that society needs.

This means that the civic university agenda overlaps heavily with the citizenship agenda. Both require socially responsible people and systems. Here we need to go far beyond such initiatives as student volunteering, welcome as they are, and rethink basic problems with the academic syllabus. At the moment, it is possible to get a good degree without engaging with major, contemporary problems and issues, and without being helped to develop the ethics and values needed to think about them. Future

graduates will need more awareness of the major issues facing the world and their part in it if they are to be effective engaged citizens.

By comparison with the US, citizenship is a neglected subject in British universities. Much as we now have a formal body of knowledge that we expect people to have when they become British subjects, we may need a similar learning programmes for aspiring professionals and graduates.

We are already starting to see students who are used to sustainability as a guiding principle for what they do, and who are used to using social networking as a tool for discussing big issues. This means that universities will not be serving their own students well if they do not take on global and local citizenship as issues for debate and action.

The Civic University and the engaged university

Much of what I have said chimes in with the definition of engagement produced by the U.S.Association of Public and Land Grant Universities Council on Engagement and Outreach:[18]

• Engagement brings the University's intellectual resources to bear on societal needs.

• Engagement is a form of scholarship that cuts across teaching, research and service.

• Engagement implies reciprocity, whereby the institutions and partners

in the community both benefit and contribute.

- Engagement blends scientific knowledge from the university with experiential knowledge within the community to establish an environment of co-learning.

- Engagement involves shared decision-making.

- Engagement is a practice that enables faculties to be better scholars; enhances the learning experience for students; and multiplies the institution's impact on external constituencies.

- Engagement is actively listening to all stakeholders that reflect the diversity of our communities – especially those stakeholders who have not been engaged before.

- A university is engaged when stakeholders see the institution as the 'resource of choice' when dealing with an issue or problem

- Engagement documents and evaluates its effectiveness through traditional measures of academic excellence.

- The quality of engagement is tied to public accountability and is measured by impact and outcomes on the communities and individuals it serves.

However there is one important addition, namely my focus on the economic, social and cultural development of particular places set within their national and global concept. I will now seek to illustrate this by reference to my own university's mission in relation to Newcastle and the North East of England. It should serve to emphasise that the precise form of civic engagement is highly contingent on the particular historical and geographical circumstances of an individual university and that there can be no 'one size fits all' policy prescriptions to promote engagement. Case studies are a valuable tool in learning and there follows one of my own institution and, by way of international comparison, of a pioneering American Land Grant Institution, Michigan State University.[19]

The Newcastle story

Newcastle University has been on a journey in which it has re-discovered its roots. It was born out of the need to support the newly emerging industries of the 19th Century and to sustain a healthy population to work in those industries. What was to become King's College, University of Durham was based on departments focusing on various areas of engineering – marine, electrical, civil and chemical, together with agriculture and medicine. The more academic parts of the University remained in the cathedral city of

Durham, where the University had strong links to the Church. By contrast, the 19th Century City of Newcastle had a flourishing secular life that embraced science, engineering and the arts, with places such as the Literary and Philosophical Institute and the Mining Institute providing locations where the world of thought and action came together.

The establishment of the independent University of Newcastle upon Tyne in 1963 was followed by a significant expansion of higher education in the UK. In Newcastle, this expansion coincided with a major programme of urban redevelopment, part of a national attempt to revive the flagging economy of the North East. An alliance between the then deputy vice chancellor, a landed aristocrat who also chaired the governing body of the Polytechnic, and the charismatic civic leader, T Dan Smith, resulted in the consolidation of the present campus as part of Dan Smith's vision of "Education upon Tyne", a vision which anticipated later notions of the knowledge or service based city. In physical terms, it embraced the polytechnic, Civic Centre, University and Royal Victoria Infirmary sites. As a result, unlike many other civic universities, Newcastle was able to expand in situ and develop a single- site city centre campus.

With the fall of Dan Smith through a corruption scandal and the growing influence of the University Grants Committee in London, the University turned its back on the city during most of the 1970s and 1980s and developed a traditional academic heartland in the arts and sciences. Equally, the region ignored its universities and polytechnics. The universities followed the money. Local and regional agencies had no remit or funding to engage with or support higher education.

It was new sources of funding from the European structural funds in the 1990s that brought about change. A growing body of evidence, some of it produced by the University's Centre for Urban and Regional Development Studies under the direction of the present author, strengthened the innovation flavour of European regional development programmes. There was a specific emphasis on encouraging innovation in small and medium enterprises, and universities were made eligible for this money. In addition a group of three regional civil servants, the regional directors for the Departments of Trade and Industry, Employment, and Environment, worked together across the Whitehall silos and played key roles in changing UK Government thinking about support for business innovation.

Partly to exploit these opportunities, the then pro vice chancellor of Newcastle University led the establishment of a network of North East universities called HESIN, Higher Education Support for Industry in the North East, and its gateway for SMEs, Knowledge House. HESIN developed into the current association of Universities for the North East as the widening role of higher education in regional development became apparent. Capacity for engagement was built up in the universities and the association through a series of short-term projects funded via a variety of European and national time-limited programmes. However, this endeavour was never embedded into the mainstream funding of higher education.

Two national developments in the 1990s moved regional engagement on: the establishment of a small higher education funding stream to support engagement with business and the community, and the creation of the Regional Development Agencies. The establishment of the North East agency (ONE North East) fundamentally changed the terms of engagement for the region's universities. Its first Regional Economic Strategy recognised the need to rebuild the economy around knowledge based industries, and consequently "placed universities at the heart of the regional economy".[20] This exhortation was translated into a "Strategy for Success" hubbed around five "centres of excellence" designated to operate between business and the research base in the universities. These were spread around the region. The Strategy also recognised the advantage a diverse set of universities gave the region, some with strong local roots and others with global reach.

Further developments for Newcastle University and for the City were the creation of the Millennium Lottery-funded International Centre for Life, the Newcastle/Gateshead bid to be recognised as a European Capital of Culture, and the designation of Newcastle as a Science City. These developments were paralleled by a restructuring of the University initiated by a new vice chancellor, appointed in 2001. This made it possible for the institution to adopt a more corporate response to opportunities in its external environment. Through restructuring, the University rediscovered its roots of "excellence with a purpose". These three developments also illustrate the importance of leadership inside and outside the university.

The International Centre for Life, led by a former civil servant with a background in urban regeneration (and vice chair of the University governing body) and the University's professor of human genetics, made it possible

to bring together on a single site the University's dispersed strengths in the rapidly emerging scientific field of human genetics, and create space for collaboration with the NHS in tackling problems of infertility. Space was also set aside for the incubation of new businesses, for a visitor attraction to enhance public understanding of the science, and for an institute to engage with ethical issues. The Centre for Life is a place where all these activities come together. ONE North East has played a key role in the development of the Centre as one of the pillars of its "Strategy for Success" programme.

A similar place-based strategy emerged in connection with the European Capital of Culture bid. The University created a new post of dean of cultural affairs and decided to contribute to the bid by the development of a Cultural Quarter, re-evaluating the use of its theatre, museums and art gallery, working in partnership with the City Council and various arts organisations. The outcome has taken the form of the remodelled Northern Stage theatre, the relocation of the creative writing support agency New Writing North onto the campus, the £26 million Great North Museum, and the redevelopment of the Old Assembly Rooms as a digital media laboratory. What were once estates liabilities are now university and community assets that contribute to the creative buzz of the city. They symbolise the intrinsic contribution of the arts and heritage to the University's academic heartland, as well as their instrumental role in civil society. For example, the School of English Literature and Language combines academic excellence and community engagement through creative writing and theatre in mutually reinforcing ways.

These programmes of activity provided the University and the city with the experience and confidence they needed to respond positively to the designation of Newcastle as a Science City in 2004. Each of the three partners – Newcastle City Council, ONE NorthEast and the University – have distinct but nevertheless overlapping objectives as described in Figure 6, such as urban renewal, attracting inward investment, and international recognition. For the University, the search for international recognition has involved the identification of scientific areas where it had research strength and visionary leaders with a strong commitment to the community, and where there are prospects of transforming the economy of the city and region by mobilising its intellectual capital. The areas are: Stem Cells and Regenerative Medicine based on the human genetics area at the International Centre for Life; Ageing and Vitality, based at the former General Hospital site; Energy and Environment; and Molecular Engineering, both on the main campus.

Figure 6: Newcastle University Business and Science City
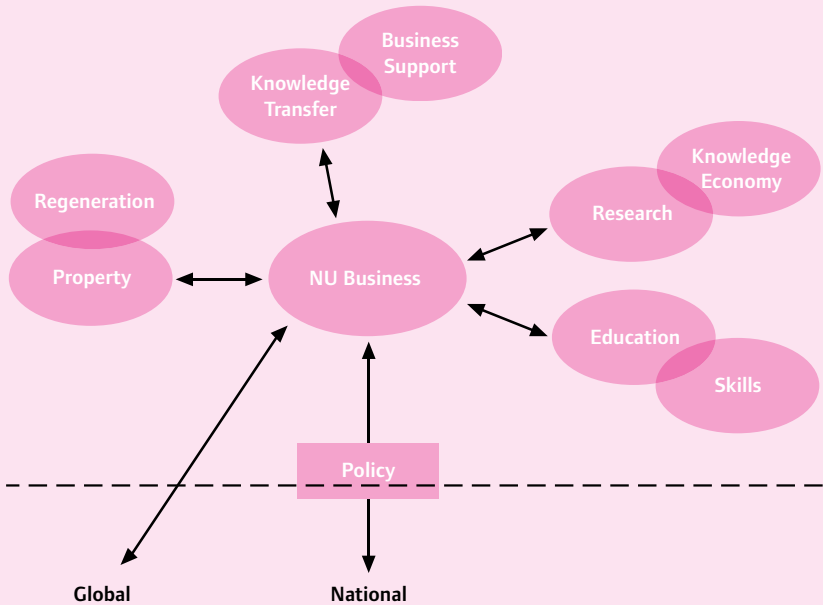
Each of these themes has been led by an outstanding academic leader with excellent communication skills and a deep commitment to making a difference to the wider society. Through the Science City programme the University has put these individuals into the spotlight as embodying externally and internally what it stands for. In each of the theme areas, 'Professors of Practise' have been recruited with backgrounds in science based business and cross appointed between the science areas and the University Business School to provide a commercial edge to the research programmes.[21] More fundamentally the University's promotion criteria have been revised to give explicit recognition to achievements in engagement.

In addition to contributing to the building of a new economic base for the city and region the University has contributed to emergence of what Susan

Christopherson calls 'phoenix industries'[22] – in this case the re-invention of shipbuilding and marine engineering in terms of an emerging sub-sea sector. (ref). This has involved spin outs in manufacturing and consulatancy, the School of Marine Sciences and Business School contributing to the building of a business cluster focussed on former shipyards at Wallsend, providing a new masters programme in Pipeline Engineering and undertaking joint research with businesses. In this way a School which had followed the shift of the marine sector to the Far East (with particularly strong teaching and research links in Singapore) has now re-engaged with an industry that it had fostered in the 19th Century.[23]

The locations have been emphasised because underpinning the Science City strategy has been the principle of bringing science, business and the community together to facilitate the exchange of knowledge through personal interaction. And because the main campus was in effect full, the partnership made the bold decision to purchase the former Newcastle Brewery site in the city centre when it came onto the market. The University subsequently decided to provide a new home for the University Business School on the site, with the express intention of building a bridge between its expertise and that of leading scientists.

The vision for the Science City involves ensuring that the University's intellectual capital is mobilised to the benefit of the people of the city and region, not just in terms of more employment opportunities, but also by contributing to health and wellbeing and to an environmentally sustainable city. A key part of the programme, led by the pro vice chancellor for teaching and learning, involves education – encouraging young people to engage with science and pursue it as a career. The University is also seeking to mobilise business and community knowledge to inform science itself, accepting that knowledge creation is a two-way street. It has been designated as a national Beacon of Excellence in Public Engagement in Science by HEFCE and the UK Research Councils and is working in partnership with the International Centre for Life and Durham University in this endeavour. The Beacon builds on the excellent work of the Politics, Ethics and Life Sciences Institute which was linked to the International Centre for Life.

The Science City themes focus on the University's science research base. Equally important to its civic engagement has been an ambition to widen participation in higher education. Through its Partners programme with

local schools, the University increased the proportion of its undergraduates recruited locally by 87 per cent between 1999 and 2006. Nearly a quarter are recruited from neighbourhoods with a record of low participation in higher education. More and more of its students are taking modules in business enterprise or community volunteering activity. On graduation, many wish to remain in the city by establishing their own businesses or working for local employers. The number of locally recruited graduates taking up employment in the region and thus remaining in the area increased by nearly 200 between 2004 and 2006, bringing the total to 800. Equally significant, 470 graduates from homes outside the region took up employment locally in 2006, 37 per cent of the University's non-local recruits.

While the emphasis so far has been on the city and regional links to the University's teaching and research, both have a strong international dimension. One in eight of its students come from outside the European Union and 27 per cent of its academic staff, 580 people, are from outside the UK. It attracts many overseas academic and business visitors and participates in international inward investment missions with ONE North East. Conference-attending academics attract fill many hotel beds in the city, helped by the city marketing agency's Ambassadors Programme. Graduation ceremonies are used to encourage many parents of new graduates to visit the region as tourists and, in some instances, as business investors. Through a national programme on Routes into Modern Languages, the University's School of Modern Languages is working with local schools to turn around the declining interest of young people in languages. The University is also working with the Chinese Government, the City Council, Northumbria University and the local Chinese community to establish a Confucius Institute to strengthen the City's links with China. It is in dialogue with various faith groups through the Council of Faiths to support overseas students and harmonious living in the city. In short, the University plays a key role in the city's international, multicultural and multi-faith life through its staff, students and alumni.

I do not claim that this kind of activity is unique to my own university. Many institutions have done at least some of what we do. But I do regard our work as being close to "best practice" in the field in terms of the seriousness and purpose with which we approached it, and the breadth and depth of its effects on the region and within the university.

It is apparent that the University's engagement with the city and region embraces virtually all aspects of its core business of teaching and research. But many of the big challenges facing the city, such as ageing and health, environmental sustainability and social and community cohesion, do not fit into the traditional disciplinary boxes. Equally important, engagement with civil society is not simply a "third task" but requires mobilising both teaching and research. For example, the city and region need graduates who can transfer research-based knowledge into practice in the workplace and the community, or who have the skills needed to utilise ever-advancing technologies or to work with disadvantaged groups.

Such a broad agenda clearly poses challenges to institutional leadership and management. A restructuring of Newcastle University initiated by a new vice chancellor in 2001 was designed to create an institution more able to respond to external opportunities in terms of engagement with business and the community as well as teaching and research.

The strengthening of the academic-based management hierarchy by the formation of three large faculties and 27 schools largely followed disciplinary lines and focused on teaching and research. It laid the foundation for a future emphasis, highlighted by a new vice chancellor who took up office in 2007, of integration across the hierarchy, not least through the appointment of pro vice chancellors for research and innovation and for engagement. Both of these roles are cross-cutting ones, carrying responsibilities which extend into the academic services which support these areas. Thus the University estate must accommodate outside parties from both the public and private sectors, and play a role in city place-making, while the communications and marketing function must contribute to positioning both the University and the city.

Realising the full mutual benefit of the University's engagement with the city and the region calls on the University to act in new ways, and makes the same demand of our external stakeholders. Underpinning Science City and the wide ranging relationships between the University, ONE North East and the City Council are a series of Memoranda of Understanding. The partners recognise that delivering on the obligations set out in these MoUs requires joint planning and the development of people who have boundary- spanning roles and who understand the drivers on each side. Building these bridges between the university and the locality undoubtedly needs strong pillars on both sides.

Michigan State University: a leading US land-grant university

Michigan State University (MSU) was the first land-grant universty and is considered one of the best public research universities in the United States.

In 1855 the federal government granted a 14,000-acre (57 km^2) plot of land to Michigan State to develop the Agricultural College of the State of Michigan. Established as a bold new experiment, the College was founded on the visionary idea that practical knowledge and training could be combined with traditional scientific and classical studies to create a higher education curriculum more suited to the skills demands of the Industrial Revolution economy, as well as provide educational opportunities for people from all classes. Part state funded, land-grant institutions always had a mandate to develop, apply and share knowledge to serve the public good, often collaborating with the community. The notion of service learning remains core in US land-grant institutions today and is central to the idea of an 'engaged scholar'.[24]

The Agricultural College served as the prototype for 69 land-grant institutions established under the Morrill Act of 1862, many of which focused on science or engineering. Legislation extensions in 1890 and 1994 have extended the number to 76.

In 1941 College President John Hannah began the largest expansion in the institution's history, so much by that by 1964 its name had changed to Michigan State University, and it had become a member of the prestigious 'Big Ten' US sporting universities (1950). The university has a proud and important history, a research pioneer and leader in many areas, notably conducting the homogenisation of milk in the 1930s and producing six winners of the Pulitzer Prize.

Today, MSU is the eighth-largest university in the United States, with 46,648 students and 2,954 faculty members. It is ranked 83rd best university in the world in the Shanghai Jiao Tong University Ranking, 71st best in the US (US News & World Rankings). In 2007-08 it had revenue of $1.8 billion, including: $460 million (26.2 per cent) in student tuition and fees; $319 million (18.1 per cent) in grants and contracts; $391 million (22.2 per cent) state/capital appropriations; and $69 million (4 per cent) investment and other revenues. The university spent nearly $377 million in 2006–07 on research. It is rightly considered a 'Public Ivy' university.

The University Office of Outreach and Engagement is develops links and partnerships with external audiences. Often, this involves helping staff to develop collaborative community-based applied research and evaluation, or to provide technical assistance and consulting. Staff are supported to extend their teaching to engage with non-traditional students at off-campus sites or by distance education. Academics and teachers provide clinical services, use community based learning experiences as part of their courses and develop and manage learning environments and exhibitions. Currently, MSU has around 70 community based projects and has 170 partnerships in more than 50 countries. It also collaborates with two other regional universities in a research corridor.

There are engagement projects a range of areas: research and practical intiatives in urban regeneration and re-designing communities; cleaning polluted groundwater with schools; developing literacy; meeting the nursing shortage and helping to rebuild Rwanda. The Office is also a partner in regional economic coalitions, such as Leap Inc, providing companies with easy access to the range of Michigan's assets, in tandem with services to accelerate business opportunities/development. This supports a drive for diversification of the regional economy, and contributes to attracting investment and creating jobs.

The Office also works with MSU Extension, a programme that carries practical, university-based knowledge to all 83 counties in Michigan. It activities are designed to extend academic and professional degree and certificate programs via MSU Global to off-campus learners, with more than 13,000 enrollments in 29 degree and certificate programs, making MSU one of the top three in online learning in the Big Ten.

'Boldness by Design', the current university strategy, sets out President Lou Anna Smith's plan to re-invigorate and expand the original land grant mission of MSU, to be recognised as global model of best practice by 2012. Based on the theme 'Innovating Our Future, Building on Our Past', three of the five strategic imperatives in the university mission statement are focused on avenues to expand local and international engagement activities, for example increasing federal applied research grants awarded from the National Institutes of Health past the $100 million mark. This is a clear and explicit commitment to the overarching university mission, 'Advancing knowledge. Transforming lives'.

Conclusion and recommendations

I have entitled this provocation Re-inventing the Civic University to contribute to a debate about the sort of public university system which might take shape in the future. I have used the term "re-invention" because many of the great UK universities, such as Newcastle, grew up to meet local needs in an industrialising society which focused on rapidly growing cities. While these great cities are still important, they now need to be seen as part of a national settlement system in which a range of larger and smaller cities host at least one university each. Moreover, each of these cities and their universities is part of a global system, seeking to respond to and shape agendas at the local, regional, national and international scales. So civic engagement is not just a local issue.

What would a national network of civic universities look like and how would we get there if it could be defined? Institutional autonomy and its corollary, academic autonomy, have been the cornerstone of the UK higher education system. Market principles of competition in research and teaching increasingly underpin this autonomy, especially competition for money and for students. Public funding for research and teaching comes in the form of separate streams of cash, as does the relatively minor third strand of HEIF funding. The integration

of these funds is entirely a matter for individual institutions. Inter-institutional collaboration and considerations of public good operate only at the margin. So in the future, Vice Chancellors should incentivised to introduce institution wide strategies for civic engagement which are embedded into teaching and research and not a separate activity. Such strategies should reflect wider societal needs locally, nationally and globally. It would be an institutional responsibility to work with outside actors and agencies to ensure the maximum impact of teaching and research. But this calls for changes in the public funding of universities along the lines suggested below.

I conclude this provocation by suggesting that an institution designated by HEFCE as a 'Civic University' should have access to a significant pot of funding. This funding would have strings attached in the form of a five year contract to deliver agreed outcomes defined in terms of local, national and international societal impacts. Institutions wishing to have such a designation would have to have undertaken a self-evaluation, with the help of peers and partners, of the strategies, structures and processes which underpin their civic engagement. Such universities could also apply for recognition by Research Councils UK as institutions which are able to maximise the impact of funded projects and programmes. This would allow

them to have grants awarded solely on academic merit, thereby replacing impact assessments of individual applications.

An institution that wished to be funded in this way as a Civic University would have to make considerable effort to develop its leadership, management and partnership working capacity. For this reason, institutions wishing to go down this route may wish to apply for development funding from the current Leadership and Governance Fund.

Recommendations

• All universities should have civic engagement on local, regional, national, European and world scales as key parts of their mission.

• University leaders need to engage with this priority.

• The funding system should encourage this priority because the alternative is a university system of dwindling local and world importance.

• It should be on a par with teaching and research as a university mission.

• The current government review of the future of universities should stress this priority.

• A wider view of the economic and social role of universities, going far beyond technology and skills transfer, is developing and should be encouraged.

• Universities inherently have a national and global role, but their status as important regional bodies with a uniquely broad remit is vital and needs to be developed.

• This is not solely a matter for universities. Companies, local government, development organisations, NGOs and the public have much to gain from thinking about how to interact more effectively with local universities.

• This interaction needs to be at the operational level as well as via top-level agreements and concordats.

• Universities should be asked to bid for civic status, with access to substantial amounts of money, in exchange for demonstrating their ability to generate worthwhile impact.

• This impact should be seen in corporate terms, not just via specific departments, centres or projects.

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