



Strathprints Institutional Repository

Conway, Cheryl and Humphrey, Lynne and Benneworth, Paul and Charles, David and Younger, Paul (2009) *Characterising modes of university engagement with wider society : A literature review and survey of best practice*. [Report]

Strathprints is designed to allow users to access the research output of the University of Strathclyde. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. You may not engage in further distribution of the material for any profitmaking activities or any commercial gain. You may freely distribute both the url (<http://strathprints.strath.ac.uk/>) and the content of this paper for research or study, educational, or not-for-profit purposes without prior permission or charge.

Any correspondence concerning this service should be sent to Strathprints administrator: <mailto:strathprints@strath.ac.uk>



**Characterising modes of university
engagement with wider society**
A literature review and survey of best practice

Final Report, 10th June 2009

Office of the Pro-Vice-Chancellor (Engagement)
Newcastle University
Newcastle upon Tyne
United Kingdom
NE1 7RU

EXECUTIVE SUMMARY

This literature review was produced at the request of Newcastle University's Pro Vice Chancellor (Engagement), Professor Paul Younger, and funded by Newcastle University's "Strategic development funds for engagement 2008-09". The review has been produced by a team from the Centre of Knowledge, Innovation, Technology and Enterprise (KITE) at the Newcastle University Business School. The project team was led by Dr Paul Benneworth of KITE, and Cheryl Conway, of the Centre for Urban and Regional Development Studies (CURDS) led the review and drafting tasks. Further intellectual input was provided by Professor David Charles, Lynne Humphrey and Professor Younger.

* * * * *

This literature review seeks to understand university engagement, and place it in a context from which useful lessons for becoming engaged can be drawn. We use a very wide definition of the term 'engagement' in this report, to refer to all the relationships and connections which universities have with the wider society, including businesses, government, the voluntary and community sector and other societal actors.

In Chapter 2, there is a review of current debates in higher education and innovation, which provide a context for understanding renewed interest in the wider social roles and missions of higher education. Engagement finds itself caught between pressures at a variety of different scales, from the conceptual, around how engagement fits with the 'idea' of a university, to issues in governance, around whether universities provide collective (welfare or community) benefits or individual (private) benefits, and also the balance between different types of engagement with different classes of what Jongbloed & Salerno call 'stakeholders' (see table below).

Chapter 2 also highlights the fact that engagement does not take place purely as a spill-over from core university activities such as teaching and research, but is increasingly a mission upon which a degree of institutional emphasis has been placed. This raises a number of interesting questions, such as whether 'engagement' is something which is more closely attuned with the institutional grain of particular kinds of universities (often seen as being second-tier or regional missions). Part of this arises from the fact that much engagement takes place in the 'natural region' around universities; this comes from the fact that 'knowledge travels on legs', so knowledge exchange tends to take place within natural commuting spaces, or regions, and in the last decade, there is an increasingly recognised regional dimension to innovation. But this has led to engagement being seen as 'regional' as opposed to 'global', leading to a potentially false dichotomy between excellence (global) and (regional) engagement (Ernste, 2007).

Table 1 Stakeholder categories and constitutive groups

| Stakeholder category | Constitutive groups, communities |
|-----------------------------|---|
| Governing entities | state & federal government; governing board; board of trustees, buffer organisations; sponsoring religious organisations |
| Administration | president (vice-chancellor); senior administrators |
| Employees | faculty; administrative staff; support staff |
| Clienteles | students; parents/spouses; tuition reimbursement providers; service partners; employers; field placement sites ... |
| Suppliers | secondary education providers; alumni; other colleges and universities; food purveyors; insurance companies; utilities; contracted services |
| Competitors | direct: private and public providers of post-secondary education potential: distance providers; new ventures substitutes: employer-sponsored training programmes |
| Donors | individuals (includes trustees, friends, parents, alumni, employees, industry, research councils, foundations,...) |
| Communities | neighbours; school systems; social services; chambers of commerce; special interest groups... |
| Government regulators | Ministry of Education; buffer organisations; state & federal financial aid agencies; research councils; federal research support; tax authorities; social security; Patent Office |
| Non-governmental regulators | foundations; institutional and programmatic accrediting bodies; professional associations; church sponsors |
| Financial intermediaries | banks; fund managers; analysts |
| Joint venture partners | alliances & consortia; corporate co-sponsors of research and educational services |

Source: Jongbloed et al, 2007; after Burrows, 1999.

This global/ regional excellence/ engagement dichotomy is explored beginning from a global perspective in some detail in the following chapter. The fact that engagement is not purely a regional phenomenon, and does not just happen out of disengaged institutional philanthropy, is indicated by the fact that there have been a number of global networks which have emerged to support university engagement. Chapter 3 reviews a number of these networks, and draws out common themes from within these networks, which in turn indicate some of the more transferable elements of university engagement with wider society.

Table 2 A typology of University Community Engagement networks based on scale and specificity of activities, with selected examples

| | Generalist: Community Engagement expertise | Focused on all Community Engagement | Focused on 1 part of Community Engagement |
|---------------------------------|--|---|---|
| Global | United Nations University Institute of Advanced Studies Global University Network for Innovation | - | UNU IAS Regional Centres of Expertise EfSD. Global Alliance on Community-Engaged Research |
| International/ Multinational | European Universities Association Association of Commonwealth Universities OECD Institutional Management of Higher Education programme Higher Education Development Association | The Talloires Network International Association for Research on Service-Learning and Community Engagement (IARSLCE) | Living Knowledge: the international science shops network Association of University Leaders for a Sustainable Future PASCAL (place management, social capital and learning regions) Observatory |
| National/ regional | Office for Community Partnerships (HUD) Association for the Study of Higher Education National Association of State Universities and Land-Grant Colleges | Higher Education Network for Community Engagement (HENCE) Australian University Community Engagement Association (AUCEA) | Campus Coalition National Service Learning Partnership |

The scope and impacts of particular activities falling within university engagement broadly defined is something which does vary widely. In particular there are clear different cultures of engagement corresponding to these HE cultures, with clear distinctions between Anglo-American, Germanic, and Hispanic approaches. Chapter 4 reviews a number of university systems, making the point that engagement has become increasingly salient in all systems, whilst those systems do clearly shape what can be achieved. The chapter concludes by attempting to compare the kinds of activities which various university systems deliver through their engagement activities. By comparing the six national systems in terms of the incentives, structures and responses for Community Engagement, and seeking commonality within these different systems, it becomes possible to see more clearly what might be termed the ‘essence of engagement’, those activities which are vital if engagement is to be successfully delivered.

Table 3 A summary of the emergence of engagement activities in a range of national HE systems

| | Traditional societal role | Key recent reforms | Approach to engagement | Key policy frameworks | Innovative approaches | HEI responses | Challenges/ barriers |
|----------------|---|---|--|--|---|--|--|
| Finland | Strong national HEI entitlement system | Concentration of competence/ non-state shift | Regional HEI partnerships in networks | Increasing centralisation of HEIs in core HI | University centres – regional confederations | Creation of new (research-led) college centres | Mainstreaming colleges beyond project life |
| Germany | Independent institutions led by professors | The creation of ten super-universities | Encouraging industry/ firm engagement | Regional innovation systems policy | New networks of universities, firms, VC, gov. | Vary at state level (Länder policy key) | Reifying engagement not core T&R |
| Spain | Providing elite for empire/ nation-building | Decentralisation post dictatorship | Always very sympathetic to societal mission | Decentralisation: new university tasks welcomed | Universities as key regional institutions | Reactive to new opportunities for funding | Universities not giving societal leadership |
| United Kingdom | Duty: useful, responsible autonomy | Dearing: mass, diverse HEIs with elite group | Beyond charity, commercial focus | Concentration, diversity, new colleges | Specific funding – HEIF and HE-ACF | High level of take-up, activity fits KPIs | What’s measured, matters; KPIs for engagement? |
| Australia | Stratified system: local institutions | Dissolution & reimposition of groupings | Driven by states seeking good local partners | National compact: \$\$\$ for results. | Bradley review: funding engagement | Smaller HEIs strongly/ well engaged | Excellence vs engagement phantom |
| Canada | Autonomous institutions, local flavour | Since 1996, new compact, \$\$\$ for results | Partners building better knowledge exchange | Huge increase in core scientific funds as result | Community/ University Research Alliance | <i>Momentum</i> report showcasing university results | Government shift: will ‘business’ replace society? |
| Netherlands | Agents of social expression and change | Encouraging useful benefits (using oil funds) | Raising social responsibility of stakeholders | Macro-programs (Nanoned); SME vouchers | Encouraging Polys to do applied research | Rising levels of income generation | Valorisation by arts, humanities, social sciences |
| Latin America | Explicit societal mission (duty) for students | Structural adjustment: push income earning | Universities as balance to strong (elite) church | Increasing Latin American leftist nationalism | Developing regional dimension | Adoption of Freirian Open Chairs | Sustaining HEI autonomy with recession/ slump |

Chapter 5 then turns to focus on the different kinds of engagement activities undertaken by universities. This chapter develops a typology which distinguishes between activities which draw on distinct elements of university activity, namely research, teaching, knowledge exchange and service delivery. Section 5.1 offers a typology encompassing the gamut of university activities which can be classed as engagement, and then the remainder of chapter 5 reviews examples of practice, identifying good practices and seeking best practices. This chapter offers a typology, and the reality of university engagement activities is that universities will assemble bundles of practice which make sense within their own institutional and broader national context, and which create synergies between their missions.

Table 4 A typology of different kinds of university engagement activity

| Area of university activity | | Main areas of engagement activity |
|-----------------------------|----|---|
| Engaged research | R1 | Collaborative research projects |
| | R2 | Research projects involving co-creation |
| | R3 | Research commissioned by hard-to-reach groups |
| | R4 | Research <u>on</u> these groups then fed back |
| Knowledge sharing | K1 | Consultancy for hard-to-reach group as a client |
| | K2 | Public funded knowledge exchange projects |
| | K3 | Capacity building between hard-to-reach groups |
| | K4 | Knowledge sharing through student ‘consultancy’ |
| | K5 | Promoting public dialogue & media |
| Service | S1 | Making university assets & services accessible |
| | S2 | Encouraging hard-to-reach groups to use assets |
| | S3 | Making an intellectual contribution as ‘expert’ |
| | S4 | Contributing to the civic life of the region |
| Teaching | T1 | Teaching appropriate engagement practices |
| | T2 | Practical education for citizenship |
| | T3 | Public lectures and seminar series |
| | T4 | CPD for hard-to-reach groups |
| | T5 | Adult and lifelong learning |

The report concludes with chapter 6, which uses the preceding review to consider how this can inform the delivery of a strategy with the aspiration to make Newcastle University’s engagement ‘world class’. Using a framework developed by Ruiz Bravo, a set of five modes of engagement are suggested, which in turn correspond to a process improvement cycle. The strategic challenge is reduced to maximising the opportunities for modes of engagement, and holding complementary engagement modes, projects and activities together within a single institution. The report concludes with what are termed the ‘Seven wicked issues’ for university engagement, the seven key areas which must necessarily be addressed, regardless of institutional or

system specificity, by those institutions which aspire to world-class engagement activity.

Seven wicked issues for developing a world class university engagement strategy:-

1. Engagement opportunities are shaped by university policy and cultures at all levels
2. Multiple internal groups within the university must be satisfied by 'engagement'
3. You must not lose sight of the mundane whilst chasing the exciting
4. External pressures and shocks will influence what can successfully be achieved
5. External societal actors are not the only stakeholders to whom universities are accountable
6. Engaging is experimental, and some experiments will unavoidably fail
7. Engagement must not be a back route for approving undeserving projects

Table 5 A developmental model of modes of university/ society engagement with external communities

| Mode of engagement | Characteristics of relations | Objective of engagement | University aim | Scope of societal response | Typical examples |
|---------------------------------------|---|---|---|---|--|
| 1: Providing information | Indirect: general public awareness raising | Informing society of university's plans, projects, opportunities and problems | Providing a positive image for HE in society, and being open about activities | "The university exists and is socially important" | News bulletins, press releases, commentaries, media announcements |
| 2. Public Relations | Direct university presence, but temporary and topic specific | Providing information; developing community rapport; shared events. | Achieve acceptance of university as active social partner (more activity...) | "The university is a present, active community participant" | University representatives in cultural and arts groups; informal discussions |
| 3. Dissemination of academic findings | Direct university participation in societal debates and discussions | Dissemination of university knowledge base in teaching & research | Shape public opinion, build and strengthen a critical learning society | Reflection on university position, then acceptance, rejection, critique | Conferences, round-tables, congresses, symposia, seminars, exhibitions |
| 4. University as a cultural influence | Direct, permanent social presence as partner; reactive to community demands | Improve academic thinking & discussions with critical societal perspectives | Promote reflexive attitudes in community and desire to evolve | New demands on university from social partners; new forms of action | Capacity-building courses, technical assistance, advisory services, free chair |
| 5. Critical engagement | Joint continuous, planned university/ community interaction & governance | Enriching societal development fed back into university practices | Forming a transformatory societal coalition based on reflective principles | Active participation in developing activities and driving change | Participatory social change in social/ economic/ environmental fields |

Source: Ruiz Bravo (1992) (translation: P L Younger).

Figure 1 The overlapping communities of interest within a world-class engaged university

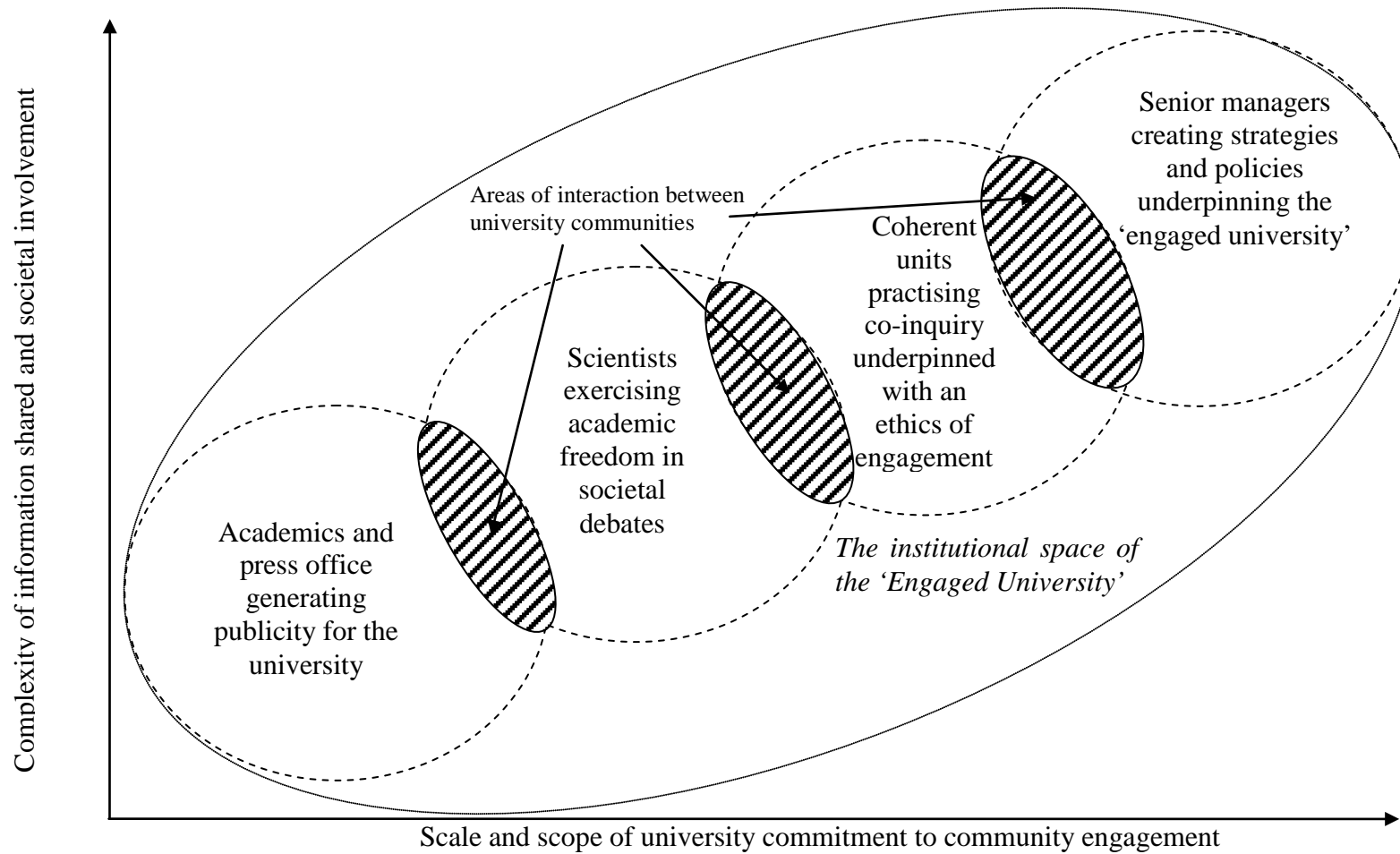


TABLE OF CONTENTS

| | |
|---|-----------|
| EXECUTIVE SUMMARY | 2 |
| ACKNOWLEDGEMENTS | 12 |
| 1 INTRODUCTION..... | 13 |
| 2 EVOLVING THINKING ABOUT UNIVERSITY ENGAGEMENT..... | 15 |
| 2.1 HISTORICAL FRAMEWORK | 15 |
| 2.2 GROWING INTEREST IN THE “THIRD MISSION” | 17 |
| 2.3 REDISCOVERING OF ROOTS IN THE US..... | 20 |
| 2.4 FROM TECHNOLOGY TRANSFER TO CO-PRODUCTION..... | 22 |
| 2.5 CURRENT CONTEXT FOR UNIVERSITY-SOCIETY ENGAGEMENT | 23 |
| 2.5.1 <i>The new knowledge economy and the ‘natural region’</i> | 24 |
| 2.5.2 <i>Globalisation and the emerging network university</i> | 24 |
| 2.5.3 <i>New governance models and the rise of the “third mission”</i> | 25 |
| 2.5.4 <i>New pressures for university engagement: the grand challenges of the 21st century</i> | 26 |
| 2.6 THE KEY QUESTIONS OF THE REVIEW | 27 |
| 3 EMERGENCE OF INTERNATIONAL NETWORKS SUPPORTING UNIVERSITY/COMMUNITY ENGAGEMENT | 29 |
| 3.1 THE UNITED NATIONS UNIVERSITY AND ITS SPIN-OFFS | 29 |
| 3.2 TUFTS & TALLOIRES – THE EVOLVING ETHICAL DIMENSION | 31 |
| 3.3 OTHER ENGAGEMENT NETWORKS | 33 |
| 4 NATIONAL TRADITIONS AND LOCAL PRACTICES OF ENGAGEMENT..... | 37 |
| 4.1 FINLAND | 38 |
| 4.2 GERMANY | 40 |
| 4.3 SPAIN | 43 |
| 4.3.1 <i>Early recognition of an engagement imperative</i> | 43 |
| 4.3.2 <i>Two main phases of reform</i> | 44 |
| 4.3.3 <i>Examples of engagement with business</i> | 45 |
| 4.3.4 <i>Engaged from birth: the cooperative movement gives rise to a university</i> | 45 |
| 4.4 UNITED KINGDOM..... | 47 |
| 4.4.1 <i>Dearing</i> | 47 |
| 4.4.2 <i>Rethinking the mission of HE in the UK</i> | 48 |
| 4.4.3 <i>Policy Framework – university/business engagement</i> | 48 |
| 4.5 AUSTRALIA | 49 |
| 4.5.1 <i>An evolving sector</i> | 49 |
| 4.5.2 <i>Engagement with place</i> | 50 |
| 4.5.3 <i>The “third mission”</i> | 51 |
| 4.6 CANADA..... | 52 |
| 4.6.1 <i>Governance of universities</i> | 52 |
| 4.6.2 <i>University Research – Science Push</i> | 53 |
| 4.6.3 <i>Investment in University R&D</i> | 54 |
| 4.6.4 <i>Community-University Research Alliances</i> | 54 |
| 4.6.5 <i>Examples of activity</i> | 55 |
| 4.7 THE NETHERLANDS..... | 56 |
| 4.7.1 <i>The legal basis for Dutch universities’ engagement</i> | 57 |
| 4.7.2 <i>The good practice of engagement by Dutch universities</i> | 58 |
| 4.8 LATIN AMERICA..... | 62 |
| 4.8.1 <i>Historical perspective: the Movimiento de Córdoba</i> | 62 |
| 4.8.2 <i>Latin American engagement practices today</i> | 64 |
| 4.9 UNIVERSITY ENGAGEMENT WITHIN NATIONAL HE SYSTEMS..... | 67 |
| 5 PRACTICES IN ENGAGEMENT..... | 70 |

| | | |
|-----------|--|------------|
| 5.1 | A TYPOLOGY FOR UNIVERSITY ENGAGEMENT ACTIVITY | 70 |
| 5.1 | RESEARCH INVOLVING EXTERNAL STAKEHOLDERS | 72 |
| 5.2.1. | <i>Undertaking collaborative research</i> | 72 |
| 5.2.2. | <i>Involving external organisations in existing research</i> | 74 |
| 5.2.3. | <i>Directly commissioned university research</i> | 75 |
| 5.2.4. | <i>Feeding back third-party research results</i> | 77 |
| 5.3 | EXCHANGING KNOWLEDGE WITH STAKEHOLDERS | 77 |
| 5.3.1. | <i>Consultancy activity</i> | 77 |
| 5.3.2. | <i>Publically funded projects</i> | 79 |
| 5.3.3. | <i>Capacity building projects</i> | 79 |
| 5.3.4. | <i>Knowledge exchange through students</i> | 80 |
| 5.3.5. | <i>Promoting public understanding of university knowledges</i> | 81 |
| 5.4. | SERVICES DELIVERED FOR EXTERNAL STAKEHOLDER BENEFIT | 83 |
| 5.4.1. | <i>Opening university infrastructure to the community</i> | 83 |
| 5.4.2. | <i>Bringing the community onto campus</i> | 83 |
| 5.4.3. | <i>Universities as ‘experts’ for societal weal</i> | 84 |
| 5.4.4. | <i>Contributing to the civic life of the region</i> | 86 |
| 5.4.5. | <i>Universities and large community development projects</i> | 87 |
| 5.5. | INVOLVING EXTERNAL PARTNERS IN TEACHING ACTIVITIES..... | 91 |
| 5.5.1. | <i>Meeting the needs of ‘hard-to-reach’ groups</i> | 91 |
| 5.5.2. | <i>Educating students in community citizenship</i> | 94 |
| 5.1.1 | <i>Supporting a public ‘marketplaces of ideas’ for its citizenry</i> | 94 |
| 5.5.3. | <i>Provision of training & continuing professional development</i> | 95 |
| 5.5.4. | <i>Supporting a regional lifelong learning culture</i> | 97 |
| 5.5.5. | <i>Other examples of university engagement</i> | 99 |
| 6 | MANAGING COMMUNITY ENGAGEMENT WITHIN A UNIVERSITY..... | 101 |
| 6.1. | INTRODUCTION..... | 101 |
| 6.2. | A PROGRESSIVE LEVELS ENGAGEMENT MODEL | 102 |
| 6.2.1. | <i>Distinguishing modes of engagement in university communities</i> | 103 |
| 6.2.2. | <i>Can seeking engagement quality undermine outcome values?</i> | 105 |
| 6.3. | COMMUNITY ENGAGEMENT WITHIN ONE INSTITUTION | 108 |
| 6.4. | SEVEN ‘WICKED ISSUES’ FOR WORLD CLASS UNIVERSITY ENGAGEMENT..... | 110 |
| 6.1.1. | <i>The implicit drivers of university engagement</i> | 110 |
| 6.1.2. | <i>Holding multiple groupings together within one institution</i> | 111 |
| 6.1.3. | <i>Balancing the exciting and the mundane</i> | 112 |
| 6.1.4. | <i>Managing external pressures on engagement activities</i> | 112 |
| 6.1.5. | <i>Satisfying core university stakeholders</i> | 112 |
| 6.1.6. | <i>Accepting the experimental nature of evolving practices</i> | 113 |
| 6.1.7. | <i>Avoiding special interest pleading</i> | 114 |
| 7. | BIBLIOGRAPHY | 115 |

Acknowledgements

This literature review was produced at the request of Newcastle University's Pro Vice Chancellor (Engagement), Professor Paul Younger, and funded by Newcastle University's "Strategic development funds for engagement 2008-09". The review has been produced by a team from the Centre of Knowledge, Innovation, Technology and Enterprise (KITE) at the Newcastle University Business School. The project team was led by Dr Paul Benneworth of KITE, and Cheryl Conway, of the Centre for Urban and Regional Development Studies (CURDS) led the review and drafting tasks. Further intellectual input was provided by Professor David Charles, Lynne Humphrey and Professor Younger.

The project has also drawn on documentary research for a series of university case studies undertaken as part of the ESRC-funded project "Universities engagement with socially excluded communities", part of the *Regional Impacts of Higher Education* initiative, which also involved co-funding from the four HE funding councils in the UK. The authors would also like to acknowledge the support of Paul Benneworth's Research Councils UK Academic Fellowship in "Territorial Governance" which has also part funded the production of this review.

This report has been drafted as a review of literature and identified best practice in university engagement as part of a programme of activities that also include university support for a number of other engagement activities. These activities will all come together in the course of 2009-10 in the development of an engagement strategy to service an ambition to make Newcastle a world-class engaged university. As this review is specifically meant to facilitate identification and adoption of third-party best practices by Newcastle University practitioners, it deliberately does not make any reference to existing examples of good practice in Newcastle University.

We were of course already aware of several excellent in-house examples, which compare favourably with many of the better projects recognised externally (for example through the website of the Talloires Network (www.tufts.edu/talloiresnetwork) of which Newcastle University is now also a member). In parallel to the preparation of this review, an extensive survey of existing engagement practices at Newcastle University was undertaken, yielding a huge response, the analysis of which is ongoing at the time of writing. When that survey reports in Spring 2009, its findings will be scrutinised together with those of the present report to devise an overall approach to best practice appropriate to Newcastle University.

We are also very grateful to the two reviewers of this report, Professor Chris Duke of the Royal Melbourne Institute of Technology (RMIT), Melbourne, Australia and Dr Ben Jongbloed of the Center for Higher Education Policy Studies (CHEPS) at the University of Twente, in the Netherlands. Both reviewers provided very detailed comments which have proven very useful in refining and clarifying the key messages in this report. Any omissions or errors remain the responsibility of the report's authorial teams.

1 INTRODUCTION

This report provides a literature report on university engagement as part of a wider package of work being led by the Pro-Vice-Chancellor (Engagement) supporting the development of engagement activities at Newcastle University. In parallel with this review of external literature, a catalogue of engagement activity within Newcastle University has also been drawn up, that is published separately. £150,000 of funding has also been made available in academic year 2008-09 for novel engagement activities, to stimulate an active set of experiments in the field of engagement. The University is committed to developing an institutional engagement strategy, and these three spheres of activity will be actively used to inform that strategy.

This literature review seeks to understand university engagement, and place it in a context from which useful lessons for becoming engaged can be drawn. We use a very wide definition of the term ‘engagement’ in this report, to refer to all the relationships and connections which universities have with the wider society (see section 2.5 for a fuller definition), including businesses, government, the voluntary and community sector and other societal actors. In Chapter 2, there is a review of current debates in higher education and innovation, which provide a context for understanding renewed interest in the wider social roles and missions of higher education. Engagement finds itself caught between pressures at a variety of different scales, from the conceptual, around how engagement fits with the ‘idea’ of a university, to issues in governance, around whether universities provide collective (welfare or community) benefits or individual (private) benefits, and also the balance between different types of engagement with different classes of what Jongbloed & Salerno call ‘stakeholders’.

Chapter 2 also highlights the fact that engagement does not take place purely as a spill-over from core university activities such as teaching and research, but is increasingly a mission upon which a degree of institutional emphasis has been placed. This raises a number of interesting questions, such as whether ‘engagement’ is something which is more closely attuned with the institutional grain of particular kinds of universities (often seen as being second-tier or regional missions). Part of this arises from the fact that much engagement takes place in the ‘natural region’ around universities; this comes from the fact that ‘knowledge travels on legs’, so knowledge exchange tends to take place within natural commuting spaces, or regions, and in the last decade, there is an increasingly recognised regional dimension to innovation. But this has led to engagement being seen as ‘regional’ as opposed to ‘global’, leading to a potentially false dichotomy between excellence (global) and (regional) engagement (Ernste, 2007).

This global/ regional excellence/ engagement dichotomy is explored beginning from a global perspective in some detail in the following chapter. The fact that engagement is not purely a regional phenomenon, and does not just happen out of disengaged institutional philanthropy, is indicated by the fact that there have been a number of global networks which have emerged to support university engagement. Chapter 3 reviews a number of these networks, and draws out common themes from within these networks, which in turn indicate some of the more transferable elements of university engagement with wider society.

The scope and impacts of particular activities falling within university engagement (broadly defined) is something which does vary widely. In particular there are clear different cultures of engagement corresponding to these HE cultures, with clear distinctions between Anglo-American, Germanic, and Hispanic approaches. Chapter 4 reviews a number of university systems, making the point that engagement has become increasingly salient in all systems, whilst those systems do clearly shape what can be achieved. The chapter concludes by attempting to compare the kinds of activities which various university systems deliver through their engagement activities. By comparing the six national systems in terms of the incentives, structures and responses for Community Engagement, and seeking commonality within these different systems, it becomes possible to see more clearly what might be termed the ‘essence of engagement’, those activities which are vital if engagement is to be successfully delivered.

Chapter 5 then turns to focus on the different kinds of engagement activities undertaken by universities. This chapter develops a typology which distinguishes between activities which draw on distinct elements of university activity, namely research, teaching, knowledge exchange and service delivery. Section 5.1 offers a typology encompassing the gamut of university activities which can be classed as engagement, and then the remainder of chapter 5 reviews examples of practice, identifying good practices and seeking best practices. This chapter offers a typology, and the reality of university engagement activities is that universities will assemble bundles of practice which make sense within their own institutional and broader national context, and which create synergies between their missions.

The report concludes with chapter 6, which uses the preceding review to consider how this can inform the delivery of a strategy with the aspiration to make Newcastle University’s engagement ‘world class’. Using a framework developed by Ruiz Bravo, a set of five modes of engagement are suggested, which in turn correspond to a process improvement cycle. The strategic challenge is reduced to maximising the opportunities for modes of engagement, and holding complementary engagement modes, projects and activities together within a single institution. The report concludes with what are termed the ‘Seven wicked issues’ for university engagement, the seven key areas which must necessarily be addressed, regardless of institutional or system specificity, by those institutions which aspire to world-class engagement activity.

2 EVOLVING THINKING ABOUT UNIVERSITY ENGAGEMENT

Engagement is an issue that has waxed and waned over the years, depending on the nature and stage of university system development. More recently it has been subject to considerable policy debate as governments have tried to encourage greater engagement and universities and other commentators have debated the nature of the university and the place of engagement within that definition. In this chapter, we trace the evolving debates around the relationship between universities and societal mission.

We open the chapter by setting out some of the historical context for university engagement with society, noting that despite rhetorical construction of ivory tower ideals, universities' justifications have always drawn solidly on a notion of societal service, and where those societal notions have been lost, universities' powers as societal actors has waned. We then turn to look at how that societal responsibility has been reinterpreted in the context of the industrial, and post-industrial age. We argue that a key moment in the conceptual reinvention of universities' societal mission, where community and public engagement caught up with commercial and business engagement, took place in the US in the late 20th century.

Our argument is that there has been an associated change in the nature of knowledge production from knowledge transfer to co-production. It is impossible to understand the rise of the engagement mission without contextualising that against a background of wider societal shifts in the last thirty years, and the impacts that these have had on higher education. Having set out some of these changes, and their impact in encouraging universities to engage with a broad set of societal partners, with very different resources, we then highlight the key dilemmas this raises for understanding university/ society engagement.

2.1 Historical framework

We begin by situating the place of engagement in a historical framework of how universities have emerged and developed and the roles they have been expected to play in civil society. As a preamble, we point to Bender's work (1988) which pointed out that universities have long fulfilled civic roles. He argues that the emergence of the Italian university model in Bologna can be seen functionally as a means to ensure the social reproduction of a courtly class which was only imperfectly served by the Church. Likewise, when Flemish nobles sought an outlet to invest the proceeds of the wool and beer trades in the late 14th century, they chose to endow a university as a means of ensuring social and commercial renewal and innovation. The fall of Antwerp in 1572 and the occupation of the southern Netherlands by Spanish forces triggered a northward movement of academics who chose to settle in Leiden. Leiden University in turn became the intellectual home of the Dutch-speaking resistance movement, and later to Dietsch cultural development.

Following the Treaty of Westphalia in 1648, Harvie (1993) argues that universities became one of the six key elements of nation-building for the emerging nation-states. When Denmark ceded the province of Scania to the Swedish Crown in the 1660 Treaty of

Roskilde, one of the first Swedish moves was to establish a university in Scania (in Lund, established 1666), to help ‘Swedify’ the southern provinces, define a role for them in Sweden’s elite life, and bind them more closely within the Swedish state. Likewise, Phillipson (1976) argues that the failure of the ancient Scottish universities to engage adequately with the Enlightenment saw their eclipsing by learned societies able to meet growing social thirst for knowledge. This saw the ancient universities stagnate for a long century until they engaged with the need to educate middle-class professions in medicine, law, and accountancy, reconnecting them to society, whilst reinvigorating the idea of a university.

The conventional European research university, typified by the Humboldtian model emerging in the late 18th century, saw no significant place for direct engagement, although there is an implication that universities will be involved in nation building. This engagement was implicit – Emperor Frederick William III established the Humboldt University as part of industrial competition with Britain and France, creating technical knowledge embodied in students to provide an impulse to Germany’s Industrial Revolution. The innovation in the Humboldtian model was that of professorial freedom, with professors given substantial choice in determining both their fields of research as well as courses offered. The Humboldtian university idea subsequently became a model (or shorthand) for large-research universities in a range of national systems.

By contrast, in the 19th century US the emergence of the land grant universities, identified a core role alongside teaching and research for agricultural extension or knowledge exchange. This was part of a contract with the state governments in that universities would provide a public role in return for a granting of land as an endowment. This also translated at the individual level into an expectation that professors would take a role of advising at least in agriculture. The related emergence of the civic university in the US also had an expectation of engagement with civic society, mainly through the urban professions.

Linked to this in a way is the issue of academic tenure. Historically in Europe academic tenure had developed to protect academic integrity and to prevent political control over academic thought. Although much confused with permanent employment, academic tenure is intended to protect academic freedom for the good of society not just for the individual. What is forgotten is that this right also confers obligations. ‘Since the point of academic tenure is to allow faculty members to pursue the truth in their disciplines wherever it leads them, those who have tenure have the concomitant obligation in fact to pursue truth in their areas to the best of their ability. They have the obligation to be as objective as they can be, to be as critical as appropriate in their field, and to follow arguments and their data wherever they may take them’ (De George, 1997, 22).

This obligation may be seen as including the obligation to speak out in public on matters on which the academic has specialist knowledge, without fear of persecution (McDowell, 2001). Other writers (e.g. Bender, 1988) have taken a broader view of academic freedom to encompass activism, arguing that academics have a public intellectual role which requires that they must contribute by offering opinions outside their area of expertise as required. This interpretation of academic freedom is arguably more important in an age of increasing specialisation where the number of societally-relevant topics to which specialists can directly speak may be drastically lower.

In the UK, the emergence of the civic redbrick universities was primarily driven by local demand and the funding from local business elites; indeed, the name ‘redbrick’ university derives from the Victoria Building at the University of Liverpool. Universities were expected to be places of practical knowledge and often focused initially on engineering and physical sciences rather than the classical disciplines of Oxbridge, supported – as was the Victoria Building, by local industrialists seeking both short-term gains through educated workforce, but also longer-term benefits which universities confer. In the subsequent expansion of the system following the Robbins review local support for universities was seen as important in selecting locations but universities were seen as part of a national system and not primarily to support local communities.

In some places universities have been established as part of a ‘consociational’ settlement, in helping to create new education opportunities for traditionally excluded groups. Examples include the Free University (Brussels) and the Catholic Universities in the Netherlands (Tilburg, Nijmegen). Some universities were explicitly established as alternatives to the established system. This is true, for instance, of many of the autonomous universities of Latin America which were founded in the wake of the Córdoba Movement (see Section 4.8). The Jesuit-led University of Central America, based in San Salvador, is a particularly striking recent offspring of this movement, being strongly rooted in the late 20th Century liberation theology movement. A European example is afforded by the Autonomous University of Barcelona, which was initially established as a second university for the growing metropolis, but which adopted a set of radical and democratic principles following the end of the Franco dictatorship, with freedom to select staff and to admit students from all social groups.

Alternatively in some countries universities have been established on a national policy responsibility to help maintain a population. In Finland, Norway and Australia the creation of university campuses in less metropolitan areas has been with the deliberate intention of supporting local development and helping to retain a local population base.

Finally in recent years a huge number of new universities have been established in areas that previously lacked a university, explicitly to support local economic development. In Spain and Greece for example there have been a large number of new greenfield campuses in regions previously lacking any university at all (e.g. in Thessaly, the Aegean Islands, the Balearic Islands and Extremadura), or in secondary cities in regions which had universities in the main centres only (e.g. Jaen and Almería in Andalusia, Girona in Catalonia, or University of Western Macedonia) A particularly interesting example of this genre (Cape Breton University), from a region with many similarities to North East England, is further outlined in Sections 4.6 and 5.4.5.

2.2 Growing interest in the “third mission”

Since the 1980s there has been growing debate about the place of a “third mission” for Higher Education Institutions, which is taken to encompass interactions with business, the valorisation of intellectual property and wider engagement with less powerful partners such as SMEs, voluntary organisations and marginalised communities. The Higher Education Funding Council for Wales defines it thus: ““third mission” activities in universities stimulate and direct the application and exploitation of knowledge to the benefit of the social, cultural and economic development of our society.” (HEFCW,

2004). Jongbloed & Salerno (2007) note that there are a large number of what they term ‘stakeholders’ (abstract categories) and constitutive groups of communities (real actors) which have relationships with universities, and who are involved in knowledge exchange with universities. This is summarised in table 1 below.

Table 1 Stakeholder categories and constitutive groups

| Stakeholder category | Constitutive groups, communities |
|-----------------------------|---|
| Governing entities | state & federal government; governing board; board of trustees, buffer organisations; sponsoring religious organisations |
| Administration | president (vice-chancellor); senior administrators |
| Employees | faculty; administrative staff; support staff |
| Clienteles | students; parents/spouses; tuition reimbursement providers; service partners; employers; field placement sites ... |
| Suppliers | secondary education providers; alumni; other colleges and universities; food purveyors; insurance companies; utilities; contracted services |
| Competitors | direct: private and public providers of post-secondary education potential: distance providers; new ventures substitutes: employer-sponsored training programmes |
| Donors | individuals (includes trustees, friends, parents, alumni, employees, industry, research councils, foundations,...) |
| Communities | neighbours; school systems; social services; chambers of commerce; special interest groups... |
| Government regulators | Ministry of Education; buffer organisations; state & federal financial aid agencies; research councils; federal research support; tax authorities; social security; Patent Office |
| Non-governmental regulators | foundations; institutional and programmatic accrediting bodies; professional associations; church sponsors |
| Financial intermediaries | banks; fund managers; analysts |
| Joint venture partners | alliances & consortia; corporate co-sponsors of research and educational services |

Source: Jongbloed et al, 2007; after Burrows, 1999.

The novelty of this situation lies in the scope and the depth of interaction between a range of communities and the university, to the point where the societal contract between universities and society is seen increasingly to depend on simultaneous engagement with a spectrum of partners (Barnett, 2000). This situation emerged over the course of the last fifty years: in the shift to what Gibbons *et al.* (1994) have termed the Mode 2 economy. But whilst Gibbons et al were primarily concerned with business innovation, this new

“third mission” is a consequence of a wide set of inter-dependencies – moral, financial, and functional – between universities, and this extended partner set.

It is constructive to trace the wider historical evolution of this “third mission”. In the post-WWII period, universities became closely involved in particular reconstruction efforts and grand national technological projects. “It is clear for everyone to see that there is a great change coming, is indeed already half here; a change in social relationships, a profound change in values. And whatever for the change may taken, one thing is certain: it will deeply affect our universities, and I would plead that universities should play their part in helping to formulate the new conceptions of society by their approach to their own problems” (Dobrée, 1943, p.5)

The rise of nuclear power involved close and concerted co-operation from universities, government and industry to ensure that fundamental and applied research dovetailed into the necessary technical knowledge to develop huge energy infrastructures oriented towards nuclear. Universities were also involved in producing the cadres of engineers necessary to staff this new industry, as well as contributing to the development of national policies for the sector. These kinds of connection between university and industry became stereotyped as the so-called ‘Mode 1’ of innovation, with universities as providers of blue skies research rather than as partners in ongoing technological development.

These arrangements came under pressure in Europe and America at the end of the 1960s as part of the more general societal challenges to existing privilege (Shils & Daalder, 2002). 1968 marked the beginning of a wave of student protests at the undemocratic nature of university governance arrangements and the ways universities and businesses worked together to create private benefits rather than social justice. At the same time, national governments began in many cases to expand the size of their higher education systems in response to the increasing technological demands of their economies. Delanty (2002) argues that this led to the rise of the ‘democratic mass university’. In a number of countries, such as Finland and the Netherlands, these pressures led to businesses literally being kicked off campus.

The problems of the 1970s revived interest in the more economic contributions of higher education to their host societies. The long recession following the oil shocks necessitated a search for maximising the benefits of existing policy actors. Universities began experimenting in making their knowledge more useful for their host societies. As early as 1970, the Belgian government sent an expert delegation to North Carolina to study the Research Triangle Park experiences, leading to the formation of the Haasrode Science Park under the leadership of Baron Guido Declerq, one of the four original delegates (Debackaere *et al.*, 2004). The Wolfson Foundation in the UK started to make investments in university research activities that had general commercial promise, at the time when the main research councils were largely antipathetic to the idea and practice of commercialisation. The Technical University of Twente in the Netherlands and the Technical University of Tampere in Finland which had sustained their commercial connections even during the early 1970s embarked on experiments in commercialisation which later fed into the canon of accepted commercialisation practises such as liaison offices, incubator units and entrepreneurship courses and programmes.

Although engagement is often seen as something which emerged in the 1990s a survey by the OECD Centre for Education Research & Innovation (1982). This report catalogued a number of interesting experiments by universities in the fields of economic and social engagement. At the time, they did not foresee the fact that the economic side of engagement would come to greatly eclipse social engagement. The report highlights the potential and practice in a number of HEIs which had developed offices for engagement with excluded communities.

The major development was a focus on engagement with business, and with commercialisation, partly driven by a concern to ensure additional revenues from the effective commercialisation of intellectual property and partly by the desire of host regions to stimulate high tech industry in silicon landscapes. Attention focused on different channels of interaction, and particularly on “spin-out” firms, but later broadened out into wider conceptions of knowledge exchange and a greater focus on SMEs. Alongside this has been the professionalization of engagement activities through the growth of industrial liaison offices which metamorphosed into wider business development units and in some cases took on wider regional engagement missions.

A particular dimension has been the emergence of the idea of the entrepreneurial university, either seen from an institutional management perspective or as part of a more innovation system perspective such as the triple helix (Clark, 1998; Etzkowitz, 2007). The notion of an entrepreneurial university is however usually ill-defined and ambiguous – is it about enterprising staff and students or the institution itself? Schumpeter’s notion of entrepreneurship is very broad – someone who takes a range of different resources and makes something better with them, which may be in social, cultural, environmental or political spheres. However, the idea of the entrepreneurial university in practice has become increasingly conflated with the idea of a profitable university. Indeed, a parallel notion of the *enterprising* university focuses primarily on the institution as a business and hence the desire to capture new revenue streams, which may place the university in conflict with academics seeking to be entrepreneurial in their own right.

There is a risk that the enterprising university in seeking to secure revenues undertakes activities and policies that are at odds with its wider social mission, running the risk of reproducing the distancing of the university from many elements of society, except for government and large business. Against this the rise of interest in wider engagement with society and community can be seen (at least in the UK) to have been facilitated by access to funding from non-university sources such as the ERDF, urban regeneration etc, which have supported engagement with other groups and interests.

2.3 Rediscovering of roots in the US

From the 1990s in the US there has been a process of the universities rediscovering their roots and the reassertion of what it might take to be a truly engaged university. Boyer (1990) argues that scholarship in the US has moved through three phases, from an original colonial college form based on advancing learning for the students with teaching as a moralistic vocation, to service in the building of the nation and the reshaping society by the land-grant university, and finally to a focus on research since the 1940s even as the emergence of a mass education system meant that much of higher education was to remain focused on teaching and service.

Boyer thus aimed to ‘reconsider’ scholarship, and reinvent a more holistic view of scholarship as ‘a variety of creative work carried on in a variety of places ... measured by the ability to think, communicate and learn’ (Boyer 1990, 15). He thus proposed four overlapping but distinct functions of scholarship:

- the scholarship of discovery;
- the scholarship of integration;
- the scholarship of application (later renamed engagement); and
- the scholarship of teaching.

A key issue in the definition of scholarship of application or engagement is the distinction it makes between applied scholarship and community service or citizenship. Glassick et al (1997) acknowledge that citizenship is meritorious and should be recognised and rewarded, but they draw a distinction between simply doing good and applying specialist knowledge from scholarship to professional activities: ‘such service is serious, demanding work, requiring the rigor (sic) – and the accountability – traditionally associated with research activities’ (Glassick et al, 1997, 12). The problem with such activity though is the difficulty of evaluation and hence the reluctance to include this in criteria for promotion. As formal promotion criteria were introduced from the 1970s to side-step the problems of subjective and legally indefensible decisions on tenure and promotion, the position of research as measured by the number and ‘objective’ quality of publications became more entrenched as the basis for advancement. If activities in support of application were difficult to measure objectively and hence were excluded from promotion cases, then academics would not ‘waste their time’ with such activities that distracted them from the activities that enhanced their promotions prospects.

Another interesting perspective on the relative importance of the different scholarships comes from the source of evaluative criteria. Glassick et al report that university guidebooks implicitly suggest different sources for the standards of attainment for research, teaching and service. Standards for research and creative work are set by disciplines and are applied generally across national education systems, and indeed are increasingly applied internationally. Standards for teaching are more likely to be applied at an institutional level, and there is some variation between universities in what is expected. In service, however, the standards are developed from the needs of the particular field of application and project and hence defy generalisation. Academics concerned about their career prospects will devote most attention to those standards that are easily translated into excellence in other institutions, so as to facilitate promotion via mobility, and give least emphasis to those things where a new employer will find little value, or may find it difficult to make a fair comparison.

In 1995 the National Association for State Universities and Land Grant Colleges in the US was sufficiently concerned about the future of higher education that they approached the WK Kellogg Foundation for support for a review of the challenges facing them. The Kellogg Foundation provided for a multi-annual commission to rethink the role of higher education, frame the possibilities for the future and suggest changes. The first of these reports or ‘letters’ to heads of institutions was on the student experience and was entitled ‘Returning to our Roots’ and the tenor of the whole exercise was one of rediscovering the relationship between universities and society. The sixth and final report was on

engagement, 'Renewing the Covenant', and sought to reaffirm the covenant or partnership between the American people and the universities. It sought an integrated approach to learning, discovery and engagement, saying 'we commit our institutions to wide-ranging examinations of our civic and democratic purposes through curricula and extracurricular activities, socially engaged scholarship, civic partnerships, and community based learning and research' (Kellogg, 1999, 24).

At the same time the federal Department of Housing and Urban Development ran a very successful scheme for Community Outreach Partnerships Centers (COPCs) to support engagement with communities. These supported student service learning within communities and a wide range of supporting activities, with good practice cases being written up and widely disseminated.

In 2002 the American Association of State Colleges and Universities sought to build on the Kellogg report with a document called 'Stepping Forward as Stewards of Place'. This explored the idea of universities as stewards of place in which they share responsibility with other public bodies in shaping the localities in which they are based. Further reports on renewing the promise and tools and good practices followed.

2.4 From technology transfer to co-production

One important debate in the context of university engagement is the nature of interactivity and relative power within engagement activities, the question of who engages with whom. When contemporary ideas around university engagement emerged in the 1980s (CERI, 1982), the dominant model of the innovation process was to regard it as a linear, model, akin to a pipeline. Universities undertook 'blue-skies' fundamental research, which was then passed to large companies, who developed new products and sold them into consumer markets (Malecki, 1997).

From the mid 1970s onwards, increasing dissatisfaction with this linear and deterministic model (Williamson, 1975) led to an increasing emphasis of the roles played by feedback loops in this process (Kline & Rosenberg 1986). This shifted towards understanding innovation in terms of regularities which emerged in the course of user-producer interaction and ultimately to the importance of institutions and structures at the national level in shaping what could be achieved, and resulting in national tendencies towards particular types of innovation (Lundvall, 1988).

In parallel with this was a shifting recognition of the shifting relationship between innovation and societies which demanded a new kind of approach from universities. The rise of the so-called knowledge economy led to an argument that there had been a shift in the organisation of society around the creation and circulation of knowledge, the so-called Mode 2 of knowledge production. This idea of mode 2 production was that different organisations may interact and play different roles in developing ideas into new products and services and that this in turn rewarded new kinds of co-operative and flexible organisational behaviour (Gibbons *et al.*, 1994). At the same time, Wenger developed his idea of 'communities of practice' which highlighted the importance of relatively small interactive, interpersonal communities of people in working together collectively to solve problems, and build shared knowledge about how to solve those problems. At its most idealistic, this drove a rhetoric suggesting universities could

potentially lie at the heart of these knowledge communities, driving innovation iteratively and interactively with a range of socio-economic partners.

From the 1980s, concurrent with the move to post-linear models of innovation, there was increasing interest from universities and policy-makers in maximising the commercial impact of universities' knowledge bases. However, the tools that were adopted in many cases drew on a very linear conceptualisation of innovation, as a pipeline of blue-skies research being transferred out from universities into corporate research laboratories, then developed in pilot production, before launching on the market. The concept of the technology transfer office emerged (e.g. Klofsten *et al.*, 2000), based on the idea that a single office could management requests from companies, identify what university knowledge could solve those problems, and draw up a contract for the university to provide a solution. These approaches failed to realise the full potential of universities in part because the nature of innovation had changed to become more interactive. As a result, innovation knowledge circulated within these communities of practice around the university, and effective solution to corporate problems required in many cases that the firms themselves participate in those learning communities.

Of course, the reality is that firms are active participants in university learning communities, and the problems that firms encounter can stimulate new blue-skies research activities and trajectories within academic departments. Successful technology transfer offices did indeed behave more as hubs for overlapping communities of practice rather than as a post-box mediating between well-informed knowledge producers and knowledge users (Benneworth, 2007). Indeed, the whole European Research infrastructure of Framework Programmes emerged from attempts to stimulate better corporate research, with universities becoming involved only later as potential solution providers for corporate problems (Sharp, 1990).

It is important therefore not to exaggerate the scale of the problem – there are certainly many technology transfer offices which are engaged in the reality of stimulating and supporting learning communities spanning universities, corporations, public sector organisations and the voluntary and community sector (Clark, 1998). However, it is clear that effective engagement requires underpinning through exchange of ideas between partners, and processes of co-learning, and in some cases, co-inquiry (jointly undertaking research activities). In this review, this is also reflected in an ongoing preference for the term 'knowledge exchange' over either 'technology transfer' or 'knowledge transfer' which are each in their own way a reductionist description of a larger process which is embedded within a cross-organisational community¹.

2.5 Current context for university-society engagement

Although there has been an increased moral imperative placed on universities to engage as part of their wider portfolio of societal responsibilities, it would be irresponsible to suggest that this "third mission" has emerged independently of other variables. Universities have an increasingly complex array of institutional missions which must be

¹ This is obviously not possible where a policy or institution includes the word Transfer in the title, or a quotation is made which talks about technology or knowledge transfer.

managed simultaneously (Neave, 2006). Moreover, the shift to new forms of public management, new forms and technologies of competition (such as league tables) and the rise of new public funding priorities all have impacts on universities and their strategic autonomy. A realistic understanding of university engagement needs to be thoroughly grounded in an understanding of these wider factors and their impacts on universities.

2.5.1 The new knowledge economy and the ‘natural region’

The first significant change influencing universities is the rise of the knowledge economy. It is now widely accepted that we live in a knowledge economy, where knowledge capital determines rates of productivity and welfare growth as much as land, labour and physical (Temple, 1998). Early macro-economic analyses highlighted a residual growth driver not accounted for in terms of traditional capital stocks, termed ‘total factor productivity’ (TFP) (Solow, 1994; Romer, 1994). From 1945-85, Solow estimated that half all growth was attributed to TFP; more recent analyses suggest its importance is rising. Unlike traditional factors of production, TFP is characterised by ‘increasing returns to scale’ (Romer, 1986): this means that knowledge capital tends to cluster in particular locations.

The reason for this is that knowledge capital is at least partly embodied in people and their networks of relationships and contacts, which provide them with capacities to solve problems and create new kinds of knowledge. Despite Manichean rhetorics about the *Death of Distance* and the *End of Geography* (e.g. Cairncross, 1997), repeated interaction for innovation is facilitated by physical proximity. One consequence of this is that people tend to cluster in increasingly large world ‘capital cities’; another consequence is the realisation that there is a regional dimension to innovation. The implication for universities is that their knowledge exchange relationships with societal actors are much easier to develop locally than globally.

Feldman & Desrochers (2003) noted that the globally-renowned Johns Hopkins university imposed a decades-long ban on its staff interacting with business. Nevertheless a series of strong connections developed into a nascent medical technologies sector (formed largely from university start-ups and spin-offs) which created an economic cluster in Maryland visible to this day. Bathelt *et al.* (2004) term this global-local tension “the global pipelines/ local buzz effect” (qv), highlighting that although ‘local buzz’ can appear small scale and unimpressive, the quality of university impacts – including regional – depends on the strength of those universities within their wider global networks.

2.5.2 Globalisation and the emerging network university

The second challenge facing universities is increasing internationalisation and globalisation, whose impacts can be seen in a variety of ways. The first is that universities are under increasing competition to attract the most talented staff and students, and are increasingly competing internationally for both these groups. A corollary of this is that there is an increasing recognition of the relationship between the attractiveness of universities and the attractiveness of their cities in which they are located. Good universities provide a location advantage for the highly mobile ‘creative

classes' so enamoured of contemporary urban managers, which perceptions of 'creative cities' can help with the recruitment new staff and students.

A second element of this is the increasing internationalisation of the business of research. In part this is a response to the growing complexity of urgent societal problems (*cf.* 2.5.4) demanding multidisciplinary responses from diverse research teams. This is also partly a response to the opportunities offered by new technologies which allow routine and regular communications between diffuse research teams working together towards common research questions and goals. The European Commission have actively pushed for internationalisation of research efforts as part of the Lisbon Agenda, and recent rounds of the EU Research (Framework) Programme have explicitly targeted internationalisation of effort, latterly through the creation of European Technology Platforms and the European Research Council.

The third area where internationalisation is having an impact is through the introduction of league tables and ranking systems which attempt to compare universities internationally. The *Jiao Tong* and *Times Higher Education* rankings have achieved currency as independent international comparisons of university quality although they have both attracted extensive criticism for the somewhat partial and/ or subjective natures of their methodologies (Marginson, 2007). However, regardless of these criticisms, these rankings are influential in a variety of ways, influencing governments, businesses, and potential staff and students.

There is evidence emerging that these ranking systems are beginning to influence universities' strategic thinking and will hence influence the make-up of higher education systems in coming years. As we argue in the following sub-section, societal impact is almost impossible to measure fairly directly, and so most ranking and evaluation systems have avoided the inclusion of all but the most simplistic engagement measures in them. Even more complex ranking arrangements reduce impacts to financial concerns and bibliometric measures, and this has the effect in a situation where universities are seeking to improve league table rankings that engagement of whatever form is seen as not being a suitable strategic task for universities.

2.5.3 New governance models and the rise of the "third mission"

The third societal change which has created new pressures for universities is the shifting paradigm of governance, from producer-led decision-making by experts towards consumer-led decision making by users. The rise of new public management, as this is often termed, has attempted to improve efficiency in public expenditure through the introduction of (quasi-)markets in the provision of public services, along with new technologies of regulation to avoid game-playing and market failure. The hallmarks of new public management are increased competition between public institutions, payment-by-results, and new regimes of audit and accountability for those institutions. All three of these factors have had significant impacts on universities, and in particular, a tendency to create strong disincentives for engagement, or at best, incentives channelled towards very particular kinds of engagement (business and commercial) (Filmer, 1997).

The first element of new public management (NPM) is creation of competition between institutions and creation of markets for services. The corollary of this is that the purpose

of these institutions becomes to compete for customers, with the net effect that strategic effort is not directed towards customers who lack resources or a strong voice. For HEIs of all kinds, there has been increased competition for students and direct research grants, and in many cases for industrial consultancy. All these items bring direct financial benefits for universities, whilst in many cases, societal benefits end up being done pro bono, and therefore regarded as an optional extra, leading to a sense that engagement is underpinned by detached benevolence.

The second element of NPM is payment by results, which is to say that are rewarded on the basis of measured outputs. A key issue for societal engagement is that outputs are very difficult to specify and to measure – a range of learned societies, research councils, education ministries, HE lobby groups and universities have spent a huge amount of time trying to identify clear social impacts (*inter alia* SSHRC, 2001; RKTTG, 2004; Metrics Expert Group, 2006; British Academy, 2008; U-Map, 2008). The key issue is the incommensurability of impacts which are not directly expressible in financial terms – how to bring together newspaper articles, student volunteering, cultural facilities, social cohesion and media appearances within a pricing framework. This is an order of magnitude different to commercial impacts, with well-configured end customers paying directly for services.

The third element of NPM is new approaches to accountability and auditing, and the increasing use of key performance indicators (KPIs) by external bodies to hold institutions to account for their decisions. For universities as much as for other public bodies, “what is measured, matters”, and as indicated above, societal engagement has proven extremely difficult to satisfactorily measure. The consequence of this becomes that societal engagement is not measured, and so from a performance management perspective, the most important management perspective within a university, societal engagement ceases to matter. The recent English experiences with HEIF4 corroborates this point, in which a discretionary quantum for societal engagement was withdrawn, and universities scaled back hugely their directed societal engagement in favour of activities which directly hit HEIFs KPI targets.

2.5.4 New pressures for university engagement: the grand challenges of the 21st century

A final pressure, which is creating increased demand for university engagement, is the recognition that humanity now faces a number of grand societal challenges which must be mastered in the 21st century if we are to safely reach the 22nd century. The shift from pre-modern society can be interpreted as the imposition of structures necessary to create stability in societies with rising agricultural surpluses through the development of urban societies and industrial production systems. Likewise, the rise of post-industrial society involves coming to terms with the ecological limits of industrial society, and to develop new instruments of social cohesion, control and resource fragmentation. In the last thirty years, the rapid pace and depth of globalisation has greatly increased potential for economic productivity and growth, but at the same time has created new possibilities for conflicts and crises. The emergence of resource scarcity and the geopolitical pressures that rapid development bring were first set out in the Club of Rome report in 1972, but it

is only very recently that they have become regarded as demanding of urgent political action.

Scientists have been involved in attempting to position these challenges more highly on political agendas. In 2008, the US National Academy of Engineering launched a consultation in 2008 on what it called the “Grand challenges for engineering”. These grand challenges are socio-technical problems facing humankind, demanding large scale solutions mixing scientific ingenuity with political will and social mobilisation. These “grand challenges”, such as energy security, better healthcare and access to water for all, require long term solutions built up from multiple actors contributing in diverse ways. Ackoff (1999) refers to this class of problems as ‘multi-disciplinary messes’ (p. 99-101, in Harding *et al.*, 2007).

“These are complex, dynamic, multi-disciplinary problems that have scientific, technical, social scientific and humanistic dimensions ... these are precisely the kinds of problems that graduates of universities will face in their work lives, and that local, regional and national governments consider to be urgent” (Greenwood, 2007, p. 109).

Universities seem to be ideally positioned to respond to these challenges not least because they possess many of the knowledges which are needed for their solution. However, multi-disciplinary messes can also be seen as marking a shift in societal relationships of knowledge production. A key element of the industrial university was the development of disciplinary canons of knowledge which extended in a relatively linear way except when theory became inadequate to explain findings and paradigm shifts occurred (Kuhn, 1962; Latour & Woolgar, 1979; Delanty, 2002). Organisational structure in the industrial university was provided by professors, departments and disciplines and gave a sense of order and directionality to the production of knowledge.

Universities will increasingly be judged on their capacity to contribute to the solution of these problems: multidisciplinary messes require new forms of institutional organisation capable of mobilising trans-disciplinary teams to work with other societal partners to address these ‘grand challenges’. How successfully universities respond will influence the future importance that societies place on the ‘institution’ of university, and so effective engagement is increasingly important for renewing the idea of the university in the course of the 21st century.

2.6 The key questions of the review

The previous section highlights the fact that the reality of university engagement is highly interdependent with wider changes in the landscape of higher education. To some extent, what universities can achieve in terms of engagement appears dependent on these variables. If public governance discourses swing much further towards NPM, then this foresees a future of the unbundled, privatised university, with a very limited role for higher education, whilst a relaxing of NPMs’ constraints in favour of producer expertise would allow more breathing space for engagement. However, it is also important to stress that university systems and institutions are also dependent on how successful engagement can be delivered – if universities become the places where the solutions to the grand challenges of the 21st century are led and integrated, then the future of the

(engaged) university is far brighter (and far more autonomous) than if this challenge is avoided.

For the next three chapters, we set aside these external pressures that universities and university systems face, to address what constitutes good practice in engagement, to some extent separated from the question of what are universities' key societal partners *demanding* from universities in terms of engagement. Returning to section 2.4, we highlight that in the context of the contemporary state-of-the-art around the current debates about engagement – the question “what would an engaged university look like in practice”? Given that we know they are complex and heterogeneous, universities appear to deliver four kinds of behaviour that characterise the abstract ‘engaged university’:-

- Pursuing the scholarship of place and the scholarship of engagement
- Processes relating to management and engagement within the complex entity of the university
- Leadership of place helping to shape the place in ways that benefit both the place and the university
- Collaborative learning within communities including local actors as more than recipients of knowledge exchange

In the remainder of the paper, we seek to explore the reality of how university systems and HEIs in reality work together to engage with a multiplicity of societal, balanced with their commitments to deliver teaching and research outputs.

3 EMERGENCE OF INTERNATIONAL NETWORKS SUPPORTING UNIVERSITY/COMMUNITY ENGAGEMENT

The idea of a university is not a static concept, but is continually evolving in response both to the ways in which particular universities themselves evolve, but also the way that societies use the primary output of universities, namely knowledge. Community engagement has come to the forefront in discussions around the nature of universities as societal institutions, and the idea of the social compact, the services and benefits which universities deliver in return for their particular privileges. However, this more abstract debate about the nature of a university – and in particular about the importance of engagement to this societal mission – are often obscured behind the intricacies of particular higher education systems.

Alongside this, there is an increasing nature that the rising importance of higher education as a societal pillar in the knowledge economy means that there needs to be a more dispassionate evaluation of role of the potential and opportunities for HE to contribute to human development. Many organisations have attempted to play this role in bringing together debates around community engagement within the idea of a university mission. As the debates have evolved, and as thinking has evolved into practice, international networks have emerged to share good practice, and to provide moral support and mentoring between institutions across a range of higher education systems.

International interest representation organisations such as the European Universities Association and the Organisation for Economic Co-operation and Development have undertaken significant studies in recent years of how universities can engage with their communities (Reichert, 2006; OECD, 2007). Although the case studies that these research papers offer are important, it is important also to highlight the importance of the international dimension in mobilising a community of universities with an interest in community engagement. These activities are not just a means to share experiences, but they can also become forums within which alternative visions for higher education are advanced, and critically, forums which have good connections to higher education policy makers.

There are also a range of organisations which have been created specifically to mobilise leading institutions internationally to begin to more actively articulate their own agenda for engagement. The Talloires Network and the United National University Regional Centres of Expertise in Education for Sustainable Development are examples of two such networks. By bringing together enthusiasts, they are seeking to create a positive vision for engagement, and use their universities as learning laboratories in developing new approaches to and models for Community Engagement.

3.1 *The United Nations University and its spin-offs*

The purposes of the United Nations are to maintain international peace and security; to develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples; to cooperate in solving international economic, social, cultural and humanitarian problems and in promoting respect for human rights and

fundamental freedoms; and to be a centre for harmonizing the actions of nations in attaining these ends. The organisation has grown into a system comprising a secretariat, funds and programmes (e.g. UNICEF, UNDP), agencies (e.g. World Health Organisation) and related organisations such as the International Atomic Energy Agency, with an annual budget of \$1.9bn.

In 1973, the United Nations University was created, at the initiative of the General Secretary U Thant, to contribute, through research and capacity building, to efforts to resolve the pressing global problems that are the concern of the United Nations, its Peoples and Member States. In short, the UNU has been created to act as the think tank for the United Nations; one of its remits has evolved to be that it is engaged with understanding how universities and higher education more generally can contribute to the global problems addressed by the UN. The UNU is therefore attempting to encourage universities to consider their societal contributions not only in terms of regional and national contribution, but to the challenges of a common humanity, addressed by the UN.

The UNU does not have a significant budget of its own, and its main form of operation is to invite participation and accredit (taxing) minimum quality standards for its participants. By doing this, it seeks to encourage a degree of conformity amongst HEIs to the issues emerging as being important for higher education. It describes itself as a “network of networks” bringing together interested institutions and helping them to deliver the critical mass necessary in order to achieve more substantial institution change within the HE sector.

The Global University Network for Innovation

The Global University Network for Innovation (GUNI) was created in 1999 by UNESCO, the United Nations University (UNU) and the Technical University of Catalonia (UPC), which hosts its secretariat and presidency. It was founded after UNESCO’s World Conference on Higher Education of 1998 to give continuity to and facilitate the implementation of its main decisions. The network, composed of nearly 150 members from over 60 countries, includes the UNESCO Chairs in Higher Education, higher education institutions, research centres and networks related to innovation and the social commitment of higher education. In each of the five world regions, GUNI has a regional office representing the network.

GUNI’s mission is to contribute to the strengthening of higher education throughout the world, by reflecting upon and fostering innovation, social commitment, and quality in higher education and its institutions.

Therefore, GUNI aims to:

- Help bridge the gap between developed and developing countries in the field of higher education.
- Contribute to the reform and renewal of higher education policies across the world under a vision of public service, relevance and social commitment.
- Foster cooperation between higher education institutions and society.
- Promote the exchange of innovative ideas and experiences to facilitate higher education institutions’ processes of change

The Global University Network for Innovation — GUNI is composed of UNESCO Chairs in Higher Education, research centres, universities, networks and other institutions highly committed to innovation in higher education. Over 100 institutions from around the world are GUNI members. The mission of GUNI is to contribute to the reinforcement of higher education worldwide by putting into practice the decisions adopted at the World Conference on Higher Education (WCHE) held in Paris in 1998. Considering the WCHE resolutions, GUNI promotes the improvement of quality in higher education, the innovation of these institutions and the strengthening of their social commitment, through GUNI annual planning and activities.

Source: <http://www.guni-rmies.net/info/default.php?id=1>

UNU are also attempting to use innovative approaches to encouraging universities to make these global community contributions. One example of this is the *UNU Regional Centres for Expertise* programme, organised through the UNU Institute for Advanced Studies, focusing on the better delivery of Education for Sustainable Development (EfSD). The RCEs seek to encourage EfSD whilst embodying the principles of the UNU; the aim is for research-led education with the potential to transform localities development potential, and which applies global best practice at the local level. Becoming an RCE by an institution involves a high level of commitment. There is an annual bidding round, and applicant institutions have to assemble an application that provides a strong evidence base that their past practices demonstrate a strong commitment to engagement and interaction.

3.2 Tufts & Talloires – the evolving ethical dimension

Another international networking organisation involved with the promotion of university/community engagement is the Talloires network. This has its roots in an occasional conference organised by the (America) Tufts University. As part of attempts to transform itself from a liberal arts college into a research-led university, Tufts organised a series of HE Leadership conferences. These took place at Tufts' European campus, established in 1978, and took the name of the location of this campus, Talloires, as the conference name. This has also influenced the contemporary perspective taken by Tufts to its own engagement activities

“As an institution, we are committed to improving the human condition through education and discovery. Beyond this commitment, we will strive to be a model for society at large. We want to foster an attitude of “giving back,” an understanding that active citizen participation is essential to freedom and democracy, and a desire to make the world a better place.” (<http://www.tufts.edu/home/about/?p=profile>)

The purpose of these conferences was to bring together international leaders from higher education to discuss pressing contemporary issues and to forge a commitment to solve them collectively. These conferences therefore became a means to reconsider the ‘idea of a university’, and in particular, the way that universities contributed to societal development, something which was becoming increasingly important as highlighted in the previous chapter. The first two of these conferences covered “Freedom of Expression” (1981) and “Challenges of the Nuclear Age” (1988), each leading to a

declaration signed by participants, including Tufts University, concerning how they would improve the way higher education contributed to these problems.

The breakthrough for Talloires as an international network came with its third conference, and what for fifteen years became the eponymous Talloires declaration. The third conference took as its theme “Environmental Sustainability” (1990), at a time when the Brundtland report had highlighted the urgency of a societal response to environmental threats. The declaration is the guiding document for the Association of and serves as a framework of action outlining the role and responsibilities of universities in supporting environmentally sustainable development and advancing global environmental literacy. The (3rd) Talloires Declaration is a consensus statement authored by 31 university leaders and international environmental experts representing 15 nations from around the world. The tenth point of the declaration committed participants to ongoing work in the area, and a secretariat, and once established, this secretariat, which evolved into University Leaders for a Sustainable Future (ULSF) and which started to recruit other universities to sign the declaration.

The Association of University Leaders for a Sustainable Future (ULSF), an affiliate of the Center for Respect of Life and Environment (CRLE), provides the secretariat services for the Talloires declaration. ULSF promotes academic leadership for the advancement of global environmental literacy. Working in partnership with more than 350 signatory institutions in over 40 countries, ULSF helps to build and strengthen institutional capacity to develop ecologically sound policies and practices, and to make sustainability a major focus of academic disciplines, research initiatives, operations systems, and outreach efforts of higher-education institutions worldwide.

This process of working to implement resultant declaration set the tone for the fourth, most recent Talloires conference and its aftermath. The topic taken for this event, held in 2005, was strengthening the civic roles and social responsibilities of higher education. The meeting brought together 29 university presidents, rectors, and vice chancellors from 23 countries. and involved a range of HE representative bodies with an interest in community engagement and civic responsibility by universities:-

- The Association of Commonwealth Universities
- Campus Compact
- The Inter-American Organization for Higher Education
- The International Consortium for Higher Education,
- Civic Responsibility and Democracy.

This fourth Talloires (17th September 2005)declaration followed the model of the third in establishing a secretariat organisation to implement the good intentions in that declaration “We commit ourselves to the civic engagement of our institutions and to that end we establish the Talloires Network, with an open electronic space for the exchange of ideas and understandings and for fostering collective action (<http://www.tufts.edu/talloiresnetwork/?pid=17&c=7>)”. The Talloires new members are committed to this in both the general but also the particular, supporting the Talloires Project, which is the promotion of literacy.

The Talloires network functions as a support for a community of higher education leaders committed to the principles of community engagement. Membership of the network

involves committing the institution to the principles of the Talloires Declaration, and must therefore be made at the highest level. Admission involves setting out current activities, and how the institution will contribute to the life of the Talloires network. There are now 68 members in the network, of which 29 are signatories to the original declaration.

3.3 Other engagement networks

There are other organisations committed to the promotion of community engagement by universities, and supporting universities in the process of becoming engaged. A number of these are international in their scope, whilst others are more focused on particular national systems. Some organisations are more generalist interest representative organisations for higher education, whilst others are focused directly on university engagement, or even one element of community engagement such as science shops or service learning. What unifies these activities across the various scales of activity and thematic areas of interest is that they bring together and support universities in becoming engaged institutions.

The **Higher Education Network for Community Engagement (HENCE)** is a response to the growing need to deepen, consolidate, and advance the literature, research, practice, policy, and advocacy for community engagement as a core element of higher education's role in society. Increasingly, higher education institutions are intentionally connecting academic work to public purposes through extensive partnerships that involve faculty, staff, and students in active collaboration with communities. This idea of "community engagement" is renewing the civic mission of higher education and transforming academic culture in ways that are both exciting and challenging

Living Knowledge: the International Science Shops Network. The idea of a science shop (*qv*) is as a focus for service learning by students, a single point where community groups can approach the university for help in accessing knowledge. The model emerged in the 1970s out of a desire to popularise and make more accessible university knowledge. Living Knowledge, the network of international science shops, emerged from a European research capacity building project (STRATA), and has evolved into an international network of science shops. The new also supports research into the science shop phenomenon, publishing a journal and organising a conference to help develop and disseminate understanding of their role in university/ community engagement.

The International Association for Research on Service-Learning and Community Engagement (IARSLCE) is an international, non-profit organization devoted to promoting research and discussion about service-learning and community engagement. IARSLCE grew out of the Annual International K-H Service-Learning Research Conference, was launched in 2005, and incorporated in 2007. <http://www.researchslce.org/>

The Global Alliance on Community-Engaged Research was created by representatives of universities, networks and civil society organizations at the May 2008 Community University Expo Conference in Victoria, BC, Canada, hosted by the University of Victoria. The International Development Research Corporation of Canada funded a specific Global Networking meeting on May 5th 2008 at which representatives of 14

countries throughout the world developed a Declaration of The Global Alliance, which was then endorsed by many of the 500 delegates at the conference.

The meeting was an opportunity to examine how the strengths of various existing networks could be best advanced for the common global purpose of using knowledge and community-university partnership strategies for democratic social and environmental change and justice, particularly among the most vulnerable people and places of the world. An added purpose was to see how the voice of majority world researchers and activists can be prominent in the emerging global networks. All of this is with the aim of strengthening the capacity of grass roots organizations to make a difference in the pressing and complex issues of poverty, violence, climate change, injustice, and health throughout the world.

The declaration is now a focus for global organizing to support and strengthen community-engaged research as a fundamental means of mobilizing and creating knowledge to contribute to human betterment, by

- sharing effective practices in strengthening engagement of communities
- supporting communities and groups to create healthier societies and environment
- developing new generations of community engaged scholars and community based researchers
- measuring collectively the impact of our work in our community and world
- advocating for enhanced policy and resource support

The main goal of the Alliance is to facilitate the sharing of knowledge and information across continents and countries to enable interaction and collaboration to further the application and impact of community-based research for a sustainable just future for the people of the world. Organizations involved in community-based research from around the world are invited to participate in an open and democratic alliance that adds value to existing networking and collaborative endeavours.

Source: <http://www.guni-rmies.net/news/detail.php?id=1238>

Campus Coalition. This started in 1985 out of a concern that universities were neglecting their role in the development of citizenship in their students. It has grown from four institutions to over 1,100 members, representing more than a quarter of all American higher education institutions. Campus Coalition was recently involved in a non-partisan campaign to increase student involvement in the 2008 presidential elections and provided resources and support for organising events, debates and other election-related activities on campus.

Australian Universities Community Engagement Alliance Inc. (AUCEA) is an alliance of 34 Australian universities committed to university-community engagement in order to promote the social, environmental and economic and cultural development of communities. AUCEA promotes direct and mutually beneficial interaction between universities and communities that is essential for the development and application of knowledge and the shaping of our future citizens.

AUCEA Principles of University Community Engagement

With the vision ‘to be the leading inclusive national forum for the discussion and development of university-community engagement, encouraging collaboration, innovation, the exchange of knowledge and the scholarship of engagement’, AUCEA has undertaken a national leadership role to:

- raise awareness and disseminate best practice in university-community engagement;
- facilitate collaborative research in university-community engagement between AUCEA members and their communities;
- promote the integration of engagement into curriculum and the student experience;
- promote the recognition of the scholarship of engagement as a valid pedagogy;
- collaboratively develop resources that support university-community engagement.

AUCEA enables Australian Universities to both share and create knowledge about community engagement. Ultimately the process which is developing trust between universities will create an effective centre for dialogue and research into university community engagement and place the scholarship of engagement on the national agenda.

Source: <http://auceam.med.monash.edu.au:8080/rs/home>

Table 2 A typology of University Community Engagement networks based on scale and specificity of activities, with selected examples

| | Generalist: Community Engagement expertise | Focused on all Community Engagement | Focused on 1 part of Community Engagement |
|---------------------------------|--|---|---|
| Global | United Nations University Institute of Advanced Studies Global University Network for Innovation | - | UNU IAS Regional Centres of Expertise EfSD. Global Alliance on Community-Engaged Research |
| International/ Multinational | European Universities Association Association of Commonwealth Universities OECD Institutional Management of Higher Education programme Higher Education Development Association | The Talloires Network International Association for Research on Service-Learning and Community Engagement (IARSLCE) | Living Knowledge: the international science shops network Association of University Leaders for a Sustainable Future PASCAL (place management, social capital and learning regions) Observatory |
| National/ regional | Office for Community Partnerships (HUD) Association for the Study of Higher Education National Association of State Universities and Land-Grant Colleges | Higher Education Network for Community Engagement (HENCE) Australian University Community Engagement Association (AUCEA) | Campus Coalition National Service Learning Partnership |

What table 2 above does is to highlight one very important feature of engagement, namely that it is not intrinsically a local activity which is undertaken as an optional, benevolent, extra by universities. There is increasing global recognition of engagement, and the development of global networks of engagement, which provide validation and review of engagement activities which in turn contribute both to universities' profile, and help to demonstrate universities' upholding a broader version of the societal compact. This helps demonstrate why a simple global excellence-local engagement dichotomy is fundamentally flawed, and underscores the fact that institutions with global orientations and missions (as much as nationally and regionally oriented HEIs) can and do find ways to marry up engagement with excellence.

4 NATIONAL TRADITIONS AND LOCAL PRACTICES OF ENGAGEMENT

To provide a context to particular institutional practices, it is necessary to understand the national systems within which particular good practices in engagement have emerged. A higher education system is not purely formed by national regulations and policies, but also the more informal cultures and agreements which shape what are accepted practices and goals. So an equally important element of understanding national systems in making sense of the traditions and cultures of engagement which have built up in particular national systems, their experiments, successful and otherwise, and the perception of past reforms. In this chapter, we examine eight national systems which have well-deserved reputations for effectively knowledge exchange between universities and society, and which provide a means to explore national context more closely. The eight examples we look at are:

- **Finland**, which developed a model for creating university colleges in the periphery, where they were run as inter-university federal colleges, and creates opportunities for aspirant professors to carve out new research niches.
- **Germany**, where there are well-developed knowledge exchange ecologies at a state level, with well-established innovation-centred intermediary centres and organisations, which have also created a shadow effect discouraging other kinds of engagement
- **Spain**, which has a century of commitment to the idea of ‘extension’, and more recently, universities have become a central part of the notion of decentralisation against fascism, creating strong regional systems to prevent the rise of neo-Francoism.
- **United Kingdom**, in which 1990s experiments in engagement caught the eye of the national HE reform commission (Dearing) and in England, were gradually become mainstreamed into an engagement policy measure (HEIF).
- **Australia**, where the universities were encouraged to engage in the 1990s from states seeking strong partners to driver economic policies in the face of recalcitrant national governments.
- **Canada**, where the government offered a formal compact to double direct research funding to universities if they could prove that they would treble their societal impacts; both parties have delivered on this promise, but it has been challenged by a recent change in government.
- **The Netherlands**, where universities have served explicitly social purposes since the 1890s, and more recently, are a key focus for the national spatial strategy, as well as developing strong regional missions in the more peripheral areas.
- **Latin America**, where there are long-established moral engagement missions, with universities compelling their students to undertake substantial volunteering work, universities embracing radical and revolutionary activities against established power

structures, and significant new engagement philosophies have emerged (notably Freire) which have had a global influence on university-community engagement.

In this chapter, we consider these eight case studies along a number of thematic areas. We consider the national ‘approach’ to engagement, in terms of universities traditional social roles, as well as the more recent key reforms to higher education generally, to consider the contemporary engagement space. We then consider the policy approaches which have been taken to engagement, and in particular, consider what kinds of innovative approaches, instruments and policies have emerged within these frameworks. Where possible, we consider how universities have responded to these policy drivers and incentives, and consider in the delivery of real engagement activities, what have are the barriers which remain to achieving engagement, and what challenges remain to threaten the fulfilment of the societal compact.

4.1 Finland

‘A regionally comprehensive higher education system of an international standard works in interaction with society at large and constitutes a strong influence on regional development’. Ministry of Education (2004) *Regional strategy for education and research up to 2013*.

Following a major policy review the Ministry of Education published the *Regional Strategy for Education and Research up to 2013*. The overarching vision is that “Finland’s welfare and international competitiveness rests on the vitality and innovativeness of the regions, which is promoted by a regionally comprehensive provision of education and research”. ‘The activities of the regionally decentralised higher education system will be based on universities’ and polytechnics’ mutually complementary knowledge, which will be developed with emphasis on the strengths of the regions.’ This includes both contributing to the Centre of Expertise and Regional Centre Programmes and to the Science Parks and technology centres.

While, a key characteristic of the Finnish Higher Education System has been the strong national coverage of provision², the recent Ministry of Education report on the Structural Development of HE system departs from this idea and calls for concentration of competence. The structural development is aimed at reducing the number of universities and universities of applied sciences, already there are mergers amongst universities. The aim is to make universities stronger, more efficient, more viable and more competitive in terms of international students. The new law will also lead to a change in the legal status of universities in Finland, giving them more administrative and economic independence, the possibility of charging university fees is also currently under debate.

² Before the 1990s Finland had a strongly redistributive regional policy and actively used higher education as an instrument in this policy. In this regard Oulu University was developed as part of a major growth pole in Lapland and three new universities were established as a dispersed network of HEIs in Eastern Finland close to the Russian border (Kuopio, Joensuu and Lappeenranta). This dispersed pattern was in part driven by a desire to provide equality of access to higher education throughout the country. The crisis of the early 1990s resulted in a massive re-ordering of the Finnish economy and public policy and a commitment to public investment in R&D and higher education.

The new reforms could have negative consequences for some rural areas and for those activities already underway in less favoured regions aimed at strengthening the regional innovation system. During the late 1990s, local leaders and managers (e.g. of companies, polytechnics, university units, regional development agencies and the chamber of commerce) in less favoured regions realising the challenging economic situation looked at ways of strengthening the local innovation environment. The main strategy was to bring knowledge into the region by a) inducing universities (and polytechnics) to found new units and by creating university filia centres and b) creating shared arenas (public spaces and networks). In 2001-2003 the Ministry of Education in association with Finnish universities established 6 university consortia to work alongside the 20 universities that already existed. The consortia were established in cities which already had some notable university activity and representation, but not universities of their own. These centres were formed to function as development tools for less-favoured regions to strengthen the institutional capacity and to promote innovation and business development. This strategy has been quite successful and the university consortiums form noticeable centres of academic research and education. Universities of applied sciences (former polytechnic) are present in all the regions where university consortiums are also present. The relationships between these two institutions are different in different regions. In some regions the relationship is quite competitive in others collaborations are more fruitful.

The new legislative and policy changes will however putting pressure on university consortiums as they represent the most decentralized part of the university system. Increasingly they will have to prove to the Ministry of Education and to the regions that they are needed. At the moment, university consortiums are “protected” by the university law, but that will not be the case in the future as they move towards greater economic independence.

University Consortia in Finland – the case of Seinäjoki

The Seinäjoki University Filial Centre opened in 2004 and is among the latest university filial centres. The network focuses on applied research based on a broad understanding of the characteristics and problems of regionally based industry. The academic actors in Seinäjoki created the South Ostrobothnian University Network (EPANET). EPANET is a co-operation network of six Finnish universities in the Seinäjoki region and is the main research “community” in South Ostrobothnia. EPANET is seen as an ‘organizational innovation’ at the regional and national level. Through the EPANET network many difficult borders and barriers between universities, between universities and polytechnic, between business and universities have been overcome. EPANET has been able to induce important firms in the region to fund research professorships and also to participate in more in-depth discussions on knowledge, innovation, applying new technologies to create a culture more favourable to technical and scientific innovations than before.

The local actors (City of Seinäjoki and the regional council) in Seinäjoki have proactively strengthened the role of the University Consortium of Seinäjoki. The main idea is to link it more tightly with the Seamk (Seinäjoki University of Applied Sciences (Seamk) has been supportive for the university consortium as they see the mutual benefit in strengthening the higher education activities in the region. Seamk has even financed the

professorships of the university consortium together with the companies of the region) a strong actor in the region. There will also be a fund of 9-10 million euros (gathered from the regional actors, such as municipalities and companies) aiming at giving more stable financial foundation for the higher education activities in the region.

4.2 Germany

During the 19th century and the first half of the 20th Wilhelm von Humboldt's heritage was seen as the educational ideal of modern German Universitäten. Institutions such as the Universität Berlin founded in 1810 represented the role of higher education as it was described by Humboldt: "It's for the universities to treat what a man can find through or in himself, namely the insight into pure knowledge." The Universität was to be a place where research was done for research's sake. With the requirements of the modern industrial society however education policy changed – and the technische Hochschulen, colleges of education and Fachhochschulen emerged - the main features of the Fachhochschulen are shorter course lengths, the stronger practical orientation in teaching and research (industrial placements or practical training are integrated into the periods of study) and a more regional focus. Many Fachhochschulen have strong ties to enterprises, especially SMEs, in the field of consulting and technical development. Professors need to have two-years previous working experience in the private enterprise sector in order to receive a professorship. Thus, personal contact with firms is common, including the participation of firm representatives in study programmes.

Steinbeis Stiftung

Steinbeis Stiftung (STW) was established in 1971 as an independent foundation led by a Board of Directors and controlled by a Board of Trustees and a Committee made up of representatives from Trade and Industry associations, academia, automotive industry leaders, representatives from ministries and financial institutions.

The objective of the organisation is to 'promote and facilitate technology transfer from research centres and universities to society and the business community especially small and medium sized companies, through different tools and interventions'.

Steinbeis Stiftung acts as a

- service centre providing administration and general services
- knowledge management centre providing consultancy services, evaluation and expertise and Steinbeis University of Berlin's courses.
- direct technology transfer

The Steinbeis Transfer Centres represent a network of technology consultants for SMEs (90% of Steinbeis Stiftung's turnover comes from consulting in technology transfer projects) offering consultancy, technology development and training. There are more than 400 centres, most of them located in Baden-Württemberg (where it was founded) and Bavaria, although present in other regions as well. Steinbeis Stiftung has also launched joint ventures in a number of other countries including China, Denmark, Finland USA.

The majority of transfer centres are located within research institutes or universities each with its own specialisation and typically a transfer centre is managed by a professor.

Regional proximity, personal contacts with SMEs, practice and problem solving and a rapid realisation of consulting and developing projects, are regarded as major success factors.

Taken from INSME – International Network for SMEs – Good Practice Analysis

Governance

The universities in Germany are in most cases public institutions of the respective state - the higher educational institutions are self-governing and self-administrating - concerning decisions which might have a direct impact on the subjects of teaching and research the Professors³ have the majority vote.

Policy Issues

Reforms aimed at bringing universities and industry together

“Germany’s universities have been criticised for turning out too few students too slowly and in the wrong academic fields.” (Financial Times, 26.10.2000). Furthermore, there has been further criticism that the structure and subjects of German higher education often do not seem to meet the needs of the companies as potential employers. Most academic fields are said to teach neither soft skills such as teamwork nor application orientated knowledge sufficiently.

As a result of these criticisms there have been some changes to internal structures within the Universitäten. For example key persons and decision makers outwith the Universitäten, especially from local companies, are grouped together in so-called “university councils”, with a remit to develop recommendations concerning the structure and content of courses etc. There have been critics towards these changes – many of them professors who fear that the university could become an institution primarily serving economic interests whereas research without an economic basis would be neglected. Defending the freedom of research and teaching they consider such “university councils” being no more than “after-work bodies missing democratic legitimisation”.

Reforms have also been introduced at a national level - one of the strategic objectives of the national reform programme is to improve science industry links through a High-Tech Strategy. An Industry-Science Research Alliance, which includes representatives from industry and the scientific community, will support the implementation and further development of the High-Tech Strategy together with the relevant government departments.

³ Professorial system in Germany - the qualification generally required for appointment as a university professor is the habilitation, which has to be acquired in a second phase following the doctorate. The actual appointment to a professorship follows official procedure at the respective university. Candidates have to present their ideas of research and teaching in different lectures. At the end of the selection process three candidates are proposed with one finally nominated by the ministry of education and research of the responsible federal state.

The annual number of start-ups by researchers from HEIs may be estimated at about 3 to 4 per 1.000 researchers while at PSREs, this figure is somewhat lower. Start-ups are facilitated by a quite well developed private Venture Capital market, VC programmes by the Federal Government (such as BTU) and specific promotion programmes for university spin-offs by the Federal Government (EXIST) and by five Länder governments. Furthermore, there is public promotion for start-ups in biotechnology via the BioRegio programme (five regions) and its successor, the BioProfile programme (competition is still underway).

EXIST: Promotion Programme for University-based Start-ups

EXIST is a support programme of the Federal Ministry of Economics and Technology (BMWi) aimed at improving the entrepreneurial environment at universities and research institutes and at increasing the number of technology and knowledge based company formations. It is part of the Hightech Strategy for Germany and is co-financed by funding from the European Social Fund (ESF). To qualify for participation, at least three different partners from a region had to work together, including at least one higher education institution. Five regions were awarded funding.

EXIST has a number of programmes:

Culture of Entrepreneurship promotes projects at universities and non-university research institutes aimed at providing skills and support for technology and knowledge-based company start-ups. In support of these activities, universities and research institutes receive a non-repayable grant over a three-year period.

Business Start-Up Grants support the preparation of innovative business start-up projects at universities and research establishments. The entrepreneurs receive a grant of between 800 to 2,500 euro per month, depending on their degree, for a maximum period of 12 months. In addition, they receive materials and equipment (worth 10,000 euro for solo start-ups and 17,000 euro for team start-ups), funding for coaching (5,000 euro) and, if necessary, child benefit of 100 euro per month. The university or non-university research institute offers them infrastructure during the pre-start-up phase and provides technical and start-up-related assistance.

Transfer of Research supports especially sophisticated technology-based business start-up projects in the pre-start-up and the start-up phase.

In 2000, a new sub-programme called EXIST-HighTEPP (High Technology Entrepreneurship Post-Graduate Programme) started. This programme runs at three universities (Jena, Bamberg, and Regensburg) and focuses on biotechnology and information technology including placements at companies. The program's participants work on research projects and business plans for start-up companies, enabling them to gain practical and research experience in the field.

The EXIST programme gives financial support for different purposes. First, the network itself is sponsored by the EXIST funds. Second, scientific support and on-going evaluation is financed within the programme. Third, countrywide publicity on activities and success within the five networks is a major mechanism for stimulating similar start-up initiatives in other regions. Fourth, direct individual support to new firm founders is provided by the sub-programme EXIST-Seed. EXIST-Seed provides support in the very

early phase of new firm creation, i.e. the focus is on encouraging the successful translation of a business idea into a business plan. The target groups are students, graduates and young academic staff, either individuals or teams up to three persons.

Evaluation

About 170 successful start-ups have been supported in the 2 and a half year period since the start of the programme. With respect to the total number of researchers in science, the start-up ratio is 3 to 4 per 1,000 R&D personnel in HEIs, and 2 to 3 per 1,000 R&D personnel at PSREs. The highest propensity to create a start-up is observed in Technical Universities. The on-going evaluation of the EXIST programme shows that there is a strong demand for start-up related qualification and further education measures in each of the five regions. In some regions, new curricula were introduced particularly dealing with new firm foundation.⁽¹⁾ The support of the start-up activities of technology-based ventures by members of the EXIST-HighTEPP program contributed to the regional development of Thuringia (Jena) and Bavaria (Bamberg and Regensburg), resulted in 17 new companies coming into operation.

Note: The Exist Programme was selected as an example of good practice in shaping conditions favourable to industry/science relations in Benchmarking Industry Science Relations – The Role of Framework Conditions (2001) commissioned by European Commission, Enterprise DG.⁽¹⁾

Leona Achtenhagen and Dodo zu Knyphausen-Aufsess (2008) Fostering doctoral entrepreneurship education in Germany. *Journal of Small Business and Enterprise Development*. Vol. 15 No. 2, 2008 pp. 397-404

Knut Koschatzky (2001) The role of higher education institutions for entrepreneurship stimulation in regional innovation systems – Evidence from the network ‘EXIST: promotion of university based starts-ups’ programme in Germany.

Reforms aimed at ensuring international competition

By promoting top-class university research within the framework of the Initiative for Excellence (“Exzellenzinitiative”), the Federal Government is aiming to establish internationally visible research beacons in Germany. Excellence Clusters, are to be established at universities and will cooperate with non-university research institutions, universities of applied sciences and industry. The Initiative has also led to a shift towards a more research led distribution of resources through ranking universities.

Critics against this excellence scheme have again used the Humboldtian ideal of “Einheit von Forschung und Lehre” (unity of research and teaching) to support their argument that the excellence initiative will create a landscape with a few elite institutions that focus on research and a majority of universities that provide education for a broader audience.

4.3 Spain

4.3.1 Early recognition of an engagement imperative

The first use of the term *extensión* – which remains the closest Spanish synonym for the word ‘engagement’ as currently used in Anglophone academia – is ascribed (Giménez

Martínez 2000) to Professor Leopoldo Alas⁴, who on 11th October 1898 made a formal proposal to the *Claustro* (= Senate) of the University of Oviedo for the adoption of a policy of *extensión universitaria*. Oviedo is - and was then - a relatively affluent city closely adjoining several extensive industrial zones, in which coal mining and steelmaking were the predominant industries. The resulting Oviedo Group, which was established to implement the engagement policy, were preoccupied with the social conditions then prevailing in the industrial districts, and began to organise study clubs and evening classes in the mining and steelworking towns. Initially naïve in their approach, focusing on bringing appreciation of the high arts to the working class, the academics involved in this work rapidly gained in appreciation of the gravity and intractability of the socio-economic mechanisms that maintained populations in conditions of poverty, with little scope for educational advancement. The limited successes of the Oviedo Group nevertheless inspired similar initiatives by fellow academics in the universities of Salamanca, Seville, Valencia, Zaragoza and Santander. By 1911, *extensión universitaria* had come to be defined as “all expansive work of an educational and social character undertaken by the university outside of its official domain of lecturing” (Adolfo Posada, cited by Giménez Martínez 2000). In the following 35 years, a significant flowering of adult education and social development initiatives occurred, particularly in the industrial and maritime cities of the north and east, only for all progress to be swept away with the advent of civil war in 1936. After the end of the Franco era, many universities re-established engagement initiatives, but few have yet expanded their efforts in this regard beyond the provision of concerts, public lectures and museum facilities.

4.3.2 Two main phases of reform

The university system in Spain has shifted from high levels of spatial concentration to increasing regional decentralization mainly as a result of the political and administrative transformation of the state which started with the democratic transition period at the end of the 1970's. Legislative changes aided the radical reform of the higher education system. In 1983, the University Reform Law was passed which led to profound changes in the Spanish higher education system.

The law introduced the following changes:

- Universities became autonomous institutions able to introduce their own qualifications, although regulations did apply to the syllabi.
- The teaching staff, who were part of a national body and who were assigned to the various different universities, began to belong to each university.
- Responsibility for universities was transferred to the regional governments, although the Council of Universities (currently named the University Coordination Council) was set up to coordinate the whole system.

⁴ More widely known in his *alter ego* as the celebrated novelist with the *nom de plume* of Clarín, author of “*La Regenta*” and other modern classics.

- Public institutions began to receive public funding from the regional government in the form of a global sum and were responsible for the internal administration of these funds.
- Private universities could be established (until that time only universities which depended on the Catholic Church were permitted).

Note: Taken from OECD report

The main tasks or functions allocated to universities, according to the University Reform Act, are: (1) cultural enhancement; (2) to provide the skills needed to perform professional activities; (3) to contribute and support the cultural and economic development of the state and their regions; and (4) the diffusion of university-based values and culture.

The situation changed once again at the beginning of the new millennium, when Spanish universities entered a new environment due to:

- A new legal framework which was designed by the central government at the end of 2001 (the Organic Law of Universities - LOU).
- An agreement reached by all European governments to transform the structure of higher education in European countries (the Bologna Declaration)
- A decrease in the number of students as a result of a spectacular drop in the birth rate.

Increasingly, the mission of the university is not only to focus on high quality teaching but also to promote research and development activities and to become actors in the building of innovative research networks.

4.3.3 Examples of engagement with business

The Castellón province of the autonomous region of Valencia in Spain provides an interesting example of a new university working together with traditional industry and SMEs. The newly created Regional Ministry of Enterprise, University and Science has taken over the responsibility for universities and also for technological and scientific activities and the development of business and trade. Its aim is to introduce a policy which links regional development with universities; other regions are introducing similar policies.

Another example is provided by the Knowledge and Development Foundation (Fundación CYD). The Fundación CYD is an organisation made up of 23 companies which aim is to analyse and promote the contribution of universities to development and whose main activity is the publication of an annual report which outlines activity. According to a survey by the Foundation, less than 20% of companies have gone to a university to carry out research projects, and universities rank only ninth out of the ten possible training suppliers considered by companies.

4.3.4 Engaged from birth: the cooperative movement gives rise to a university

In the general narrative of engagement, it is typically assumed that the university will be a pre-existing institution, which then figures out how best it should engage with the

surrounding society. However, when the forerunner institutions of many of the UK's civic universities were originally founded in the 19th Century, they were called into existence by civil society, which had identified clear needs for education in key areas such as health and engineering, and then established higher education institutions to serve them. While these origins are, in many cases, shrouded from contemporary perceptions by the mists of time, a more recent example of a similar process in the Basque Country of Spain provides a salutary reminder that it is entirely possible for an 'engaged university' to be purpose-built *ex nihilo*. The case in point is the Mondragón Unibertsitatea⁵, which was officially established as a university in 1997 by an act of the Spanish parliament. Mondragon Unibertsitatea was created by the merger of three previously-existing educational cooperatives, all of which were constituent societies of the over-arching Mondragón Cooperative Corporation (MCC).

The remarkable history of MCC has been recounted at length by MacLeod (1997); it is now the world's largest workers' cooperative organisation. With an annual turnover in excess of €1bn, and a workforce in excess of 100,000, MCC is now one of Spain's ten largest companies, with some 250 daughter cooperatives active throughout Spain and overseas. Perhaps the most visible of these daughter cooperatives is the hypermarket chain *Eroski*. MCC was established in the wake of the Spanish civil war, by people who had been on the losing side and were sure they would receive no assistance from the Franco regime in Madrid. Its present day profile vindicates a visionary approach to regional economic development, in which workers are not paid a wage as such⁶: "Co-op members don't receive a salary. They receive an advance of what they expect the company to earn, so wages reduce alongside performance. The worst-hit co-ops can receive funds from other co-ops in the group, and their members can be relocated temporarily or permanently to co-ops in a less critical position". In addition to mutual aid to sustain employment, all of the cooperatives in the MCC group invest at least 10% of any surpluses in local community projects in the cultural and educational fields. It was precisely the latter that led to the establishment of a technical institute (Goi Eskola Politeknikoa "Jose M^a Arizmendiarieta"), a community business college (ETEO), and a teacher-training institution (Irakasle Eskola). Upon merging to form Mondragón Unibertsitatea, these three entities became the three faculties of the new university. The university currently describes itself as follows⁷:

Mondragon Unibertsitatea es una Universidad de iniciativa y vocación sociales, declarada de utilidad pública y sin ánimo de lucro.

Mondragon Unibertsitatea is a university of social vocation and initiative, formally established as a non-profit entity for public benefit.

Comprometida desde su nacimiento con

Committed from the first to quality in

⁵ www.mondragon.edu (last accessed 2-2-2009).

⁶ Carlos Fernández Isoird, quoted by Alison Benjamin, *The Guardian*, p. 1 *Society* section, 7-1-2009; available on-line at: www.guardian.co.uk/society/2009/jan/07/spain-basque-co-operative-business-collective-society-social-revolution (last accessed 2-2-2009).

⁷ Translation by P Younger of text posted at: www.mondragon.edu/que-es-m-u (last accessed 2-2-2009).

la calidad en la educación y la orientación práctica de sus estudios, en Mondragon Unibertsitatea otorgamos una gran importancia a la formación integral de los estudiantes.

education and to practically-oriented studies, in Mondragon Unibertsitatea we place great importance on the integral development of our students.

Somos una universidad cooperativa, perteneciente a la Corporación Cooperativa MCC, con una clara vocación humanista y comprometida con nuestro entorno, con nuestra sociedad y con nuestro tiempo.

We are a cooperative university belonging to the MCC Cooperative Corporation, with a clear humanist vocation and a commitment to our surroundings, to our society and to the times in which we live.

Nuestra pertenencia a la Corporación Cooperativa MCC nos permite mantener una estrecha cercanía al mundo de la empresa, posibilitando a nuestros alumnos que desde el inicio de sus estudios tomen contacto con la realidad laboral.

The fact that we belong to the MCC allows us to maintain a close link to the business world, to the benefit of our students, who from day one of their studies are in intimate contact with the world of work.

Such, then, is the manifesto of a university which was borne out of the very spirit of engagement which other higher education institutions currently aspire to “retro-fit”.

4.4 United Kingdom

The current British higher education system incorporates several distinct rounds of growth. This started with the establishment of the ancient universities of Oxford and Cambridge in the twelfth and thirteenth centuries; the civic, red-brick universities of the late nineteenth century based in the major industrial cities such as Manchester, Leeds and Bristol; “new” universities prompted by the Robbins Report of 1960s often located on green-field campuses; and, most recently, the former local authority controlled polytechnics which gained university status in 1992. Within this new system most institutions have also seen massive expansion, as participation rates.

4.4.1 Dearing

In the mid 1990s after a period of renewed expansion and the unification of the universities and polytechnics the higher education system was perceived as being in a period of crisis. Many aspects of the system were under pressure as a result of the reduction of the unit of resource – student numbers had grown more rapidly than costs – and the mission and role of universities was a subject of public debate. With the government seeking ideas on the future funding of universities a committee of inquiry was established under the chairmanship of Sir Ron Dearing.

The remit of the committee was to:

‘To make recommendations on how the purposes, shape, structure, size and funding of higher education, including support for students, should develop to meet the needs of the United Kingdom over the next 20 years, recognising that higher education embraces teaching, learning, scholarship and research.’

As the most comprehensive policy review of higher education since the Robbins report of 1963, the Dearing Report was seen as a blueprint for at least the next decade, and made 93 recommendations aimed at government, HE managers and other stakeholders. These recommendations were addressed in a series of responses by the government, funding bodies and the universities themselves through CVCP.

4.4.2 Rethinking the mission of HE in the UK

The nature of the engagement and mission towards the locality or region is a prime example of this differential, notably between the former polytechnics which were always intended to be more locally and vocationally oriented, and the old universities which have traditionally serviced national needs in terms of both graduates and research. Whilst the regional agenda is increasingly important for the old universities as well as the new, the key difference today is the varied and multiple missions that all universities need to fulfil. New demands from the regional scale, and the availability of regional funding sources, are paralleled by the globalisation of many of the markets in which universities operate: for students, for ‘courseware’, and for research. National policy also seeks both to reinforce these two scales of local and global, as well as reinforcing national level systems of standardisation, accreditation and quality assurance.

4.4.3 Policy Framework – university/business engagement

Measures to encourage university industry interaction have a long history in the UK, some with a distinct regional or local dimension. Currently there is a rather complex mixture of national and local measures, some originating from previous programmes and initiatives, some having continued over many years and some newly established. Indeed the history of policy to encourage university industry engagement is one of constant change and a rapid stream of new initiatives, especially since the early 1980s.

Measures that have responded to the challenge to strengthen linkages between the research base and business include the Higher Education Reach Out to Business and the Community Fund (HEROBC); Higher Education Innovation Fund (HEIF); Knowledge Transfer Partnerships; Faraday Partnerships; CASE; Knowledge Transfer Networks.

The Higher Education Reach Out to Business and the Community Fund (HEROBC) was established in 1999 and rewarded universities for ‘strategies and activities which enhanced interaction with business, promoted technology and knowledge exchange, strengthened higher level skills development, improved student employability and helped recognise the importance of university interaction with business alongside education and research’. The fund was intended to be a third stream of funding, complementing existing grants for teaching and research, to reward and encourage HEIs to enhance their interaction with business. HEROBC ran over two programmes with the third round becoming the Higher Education Innovation Fund (HEIF).

The Higher Education Innovation Fund (HEIF) which builds capacity in English universities for knowledge exchange and commercialisation activities is a permanent third stream of funding (alongside those for research and training) which universities may bid for in order to top up venture capital funds and other knowledge exchange activities. Activities supported under HEIF include commercialisation of world-class research, collaboration between HEIs to exploit shared knowledge and facilities, and the involvement of universities and colleges in the regeneration of their regions. Universities have also been supported in the employment of specialist staff, establishing business incubators, improving intellectual property infrastructure and providing enterprise training for staff. The summary evaluation of HEIF 2001-2005 concluded that third stream activity had been much improved within higher education institutions and their business and community partners. HEIF incorporates funding for activities previously supported through the University Challenge fund and the Science Enterprise Challenge fund and will rise to £110 million (€157 million) by 2007-08.

4.5 Australia

The evolution of the universities in Australia has deep parallels with the UK, the phased development of a university system from the 19th century, the recent incorporation of technical institutions as universities, a strong hierarchy of institutions led by a set of metropolitan research universities, a broad mission in which regional engagement plays a particular role for the most recent institutions, and a highly international orientation especially with international students as a key source of income. The key difference with the UK though is the two tiers of governance in terms of state and Commonwealth, and the particular geography of Australia with the tyranny of distance and the great divide between state capitals and all other regions.

4.5.1 An evolving sector

The development of the Australian higher education system followed a gradual evolution starting with a first round of 'sandstone' universities having been established in the state capitals in the late 19th and early 20th century. Equivalent to redbricks these civic universities remain the research leaders in the system. This group were supplemented with a few new establishments during the mid twentieth century, the University of New England at Armidale (in 1938 as a college of Sydney but becoming independent in 1954), and the Australian National University in Canberra in 1946, with several more established from the 1950s to 1970s mainly in the capitals or other large cities New South Wales, Monash, Griffith, Wollongong, Newcastle, Flinders. In 1988 the Dawkins reforms encouraged the conversion of institutes of higher education into universities. These were mainly in two groups: a set of Institutes of Technology, much like the British polytechnics which were based in the cities such as QUT, RMIT, Curtin etc; and Colleges of Advanced Education were somewhat smaller colleges more widely distributed in cities and rural areas, and these were often either amalgamated with other universities or brought together into multiple site universities, such as Central Queensland, Southern Queensland, Charles Sturt, South Australia. Now with 37 public universities in Australia, there are well over a hundred campuses, and the number keeps increasing despite occasional closures.

The governance of the system is divided between state and Commonwealth (federal) governments. The first universities were established by the states, and states retain the power to establish and regulate universities and approve the appointment of governing bodies. All universities, with the exception of the ANU, have been established by an act of a state parliament, and the original acts in some cases set out a mission for the university in terms of its contribution to the state. The extreme case of this is the University of the Sunshine Coast, the most recent of the universities whose act of establishment sets out a clear mission to support its local region. State governments do not provide significant funding for universities, but only ad hoc project funding for state objectives. They do however have to be consulted by universities on a wide range of financial and legal matters as the universities are state statutory bodies.

The Commonwealth government provides core funding for teaching and research and determines student places and national policy frameworks. As in the UK there have been some major shifts in policy over recent years with key steps towards a more market oriented system as a result of first the Dawkins reforms and more recently the Nelson report. The emphasis in these reforms have all been towards a more diverse source of funding, with a much greater share coming from students in the form of HECS fees from Australian students and a greater focus on international students both on-shore and off-shore. Universities have also increased their focus on income from engagement with business, commercialisation and other partners, although it is the older research-based universities that have the advantage in winning funds from commercial activities.

4.5.2 Engagement with place

States have worked with their universities to attract Commonwealth student places in a political process whereby new campuses have often been offered up as political prizes. Local communities lobby intensely for campuses as for small towns this is seen as the only way to retain young people in the area, or provide opportunity for those that do not wish to move away. New campuses have thus often been linked to marginal Commonwealth constituencies. In addition some growing areas on the edges of the state capitals have argued that they are underprovided in student places and hence for example there has been a new university on the Sunshine Coast north of Brisbane, expansion of Griffith onto the Gold Coast to the south of Brisbane and a university to cover Western Sydney.

A key driver of university engagement with place is a market driven system in which universities compete for students, and the 'regional' universities outside of the major cities with a base in a network of small and often stagnating towns have targeted growth areas in and near the metropolitan areas as well as international students taught in Sydney, Brisbane and Melbourne. Hence the regional orientation of universities is a complex landscape as universities are drawn into state priorities, develop local partnerships where appropriate and operate in national and international markets and networks. In some cases universities operate across state boundaries, on the one hand setting up remote campuses in state capitals where it is easier to attract fee-paying international students, but also in the case of Southern Cross University setting up just over the border to tap into the booming Gold Coast local market.

In the cities some of the large metropolitan universities have been closely linked with state economic development strategies, notably in Brisbane and Melbourne, with large state investments in science infrastructure (eg the Australian synchrotron beside Monash) and various programmes for collaboration with business. Social and community links are also well developed, and shared sites with community facilities, themed urban villages etc are developing. In Brisbane for example QUT has been involved with the Queensland government in the development of a new urban village themed around creative industries, where a large derelict site on the edge of the city centre was redeveloped around a new university campus, but with other uses including vocational education, public and private sector housing, local retail and commercial space. The university accommodation was focused on the creative industries and included space for a commercial theatre company and facilities that could be rented to individual artists and local firms. Elsewhere in the city another precinct is being developed focused on environmental and health technologies.

In so-called regional areas, small campuses in relatively small towns often have to provide considerable local facilities in the absence of other forms of provision, and the university campus becomes a key hub of local life. Here the emphasis is on sustaining the local population and universities may share services such as libraries, arts centres and sports facilities with the local community. Some of the more interesting developments are in the growing urban fringe where a university campus may become a focus for urban development. On the Sunshine Coast the new university was located away from the existing town centres and is becoming a new urban node with schools, a hospital and commercial space being developed around it. To the west of Brisbane a new masterplanned community in Ipswich has attracted the University of Southern Queensland as an anchor tenant of its town centre, and as a marketing symbol of the quality of local services and quality of life.

4.5.3 The “third mission”

Against this background universities have been taking the “third mission” very seriously, developing strategic plans for engagement, embedding service in workloads and reward systems and developing a vast range of initiatives. Most universities have dedicated engagement staff, and there is a national network, the Australian Universities Community Engagement Alliance (AUCEA) with an annual conference and which disseminates good practice. Ad hoc groupings have also formed in some states although formal collaboration between universities is still limited except in research through the well established Cooperative Research Centre programme.

The Commonwealth government has not yet introduced a significant support programme for regional engagement despite much talk and lobbying, although there is a regional loading on the block grant for universities outside of the metropolitan areas. A few universities are using a programme called Collaborative and Structural Reform Fund to support local employer engagement and some collaboration across institutions related to teaching as well, although the amounts of funding are quite small.

In the meantime universities develop projects based on small scale resources and bringing together funds from a variety of sources, often tying community engagement into teaching initiatives.

The bigger agenda though is the prospect of major reform ahead with a desire by central government to reduce the number of full-range universities and various alliances and proposals being discussed among universities. Future options could include state or regional system universities, or even alliances between similar universities across state boundaries. The Bradley Review of Higher Education delivered its final report and recommendations in December, with radical suggestions for the governance of the system, funding and regional coverage. Particular proposals include additional funding for provision in rural areas and the possibility of a new national university for ‘regional areas’. This latter point has been recognised by some of the existing regional providers including Southern Cross and Charles Sturt universities who have proposed to merge with another university (probably from Queensland) to provide this function.

4.6 Canada

4.6.1 Governance of universities

Within Canada, there are two levels of independent government recognized under the Constitution of Canada, the federal government (Government of Canada) and the 10 provincial governments. In addition there are three territorial governments and thousands of municipal governments.

Post-secondary education in each province or territory is the responsibility of the respective provincial or territorial government. Federal government’s role is through indirect funding via grants to the provinces and financial support for students. The CMEC (Council of Ministers of Education) was created in 1967 to act as the national voice for education in Canada and to represent Canada’s position internationally with respect to post-secondary educational issues. The CMEC consists of Ministers of Education from the 10 provinces and three territories. The CMEC described the governance structure associated with Canada’s post-secondary education system in the following way:

“Universities are largely autonomous; they set their own admissions standards and degree requirements and have considerable flexibility in the management of their financial affairs and program offerings. Government intervention is generally limited to funding, fee structures, and the introduction of new programs. In colleges, however, government involvement can extend to admissions policies, program approval, curricula, institutional planning, and working conditions. Most colleges have boards of governors, appointed by the provincial or territorial government with representation from the public, students, and instructors. Program planning incorporates input from business, industry, and labour representatives on college advisory committees.” The last decade has also seen the entry of private (some for profit) organizations with degree awarding credentials although questions are currently being raised regarding the comparability of these qualifications.

The community colleges maintain close linkages with their local communities. This is reinforced by the network of campuses spread throughout the provinces in which they operate. Community outreach has been part of the mandate of community colleges since their inception. However, universities also clearly and explicitly recognize the importance of service to communities, as is captured in mandates, mission statements and strategic directions of many of the institutions.

4.6.2 University Research – Science Push

Recognizing that urgent action was necessary to ensure Canada's long-term economic growth and overall well-being, the federal government initiated a major review of its science policies and programs. This review concluded with the 1996 report *Science and Technology for the New Century*, which noted that, "science and technology (S&T) play a critical role in the health and well-being of Canadians and in the country's ability to generate sustainable employment and economic growth. In 1997, the federal government initiated a long-term reinvestment strategy for R&D that positioned universities as a central pillar of the Canadian R&D system. Beginning in 1997, federal budgets introduced substantial new R&D funding mechanisms to build capacity. The four key areas of investment were: increased support for the direct costs of research; funding a portion of the indirect costs of research; the purchase and operation of world-class research infrastructure; and the attraction and retention of human resources for the research effort.

Components of this strategy included for example the Canadian Foundation for Innovation⁸, the 21st Century Chairs of Research Excellence⁹, Networks of Centres of Excellence¹⁰, Canadian Institutes of Health Research, Genome Canada and increased financial support to graduate students through the Canada Graduate Scholarships program. Federal funding also comes through the three federal research granting agencies (the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council, and the Canadian Institutes of Health Research). It was recently estimated (Momentum Report 2005) that the federal government has invested roughly \$11 billion in federal research funding since 1997 most of which has come through the research granting councils.

At the National Summit on Innovation and Learning in November 2002, the Association of Universities and Colleges of Canada (AUCC) and the federal government agreed to a number of commitments to facilitate knowledge creation and exchange¹¹. The Government committed to provide the necessary levels of investment required to build, maintain and grow an internationally competitive university research sector and in return Universities collectively accepted the responsibility to report on their progress towards reaching research and commercialization performance targets as detailed in the (AUCC) Action Plan. The latest of these reports prepared by the AUCC *Momentum: the 2005 report on university research and knowledge transfer* reports on the collective efforts of universities in relation to research, knowledge exchange and innovation.

⁸ CFI's mission is to "strengthen the capacity of Canadian universities, colleges, research hospitals and non-profit research institutions to carry out world-class research and technology development that benefits Canadians.

⁹ The program assists Canadian universities, and their affiliated institutes to attract and retain researchers.

¹⁰ The NCE program fostered multidisciplinary research among universities, industry, government and not for profit organisations by bringing them together to work on issues of national significance such as health, telecommunications and space research. Currently, there are 21 networks.

¹¹ These agreements were documented in the Framework of Agreed Principles on Federally Funded University Research.

The key commitments with regard to R&D outlined in the plan included a doubling of university research performance, increased knowledge exchange activities and a tripling of universities' collective commercialization performance. The most recent results of the Statistics Canada survey show that between 1999 and 2003, universities more than doubled their total gross income from commercialization, from \$23.4 million to \$51 million.

4.6.3 Investment in University R&D

In 2004 universities accounted for 38 percent of all research in Canada and between 29 to 64 percent of all research performed in each province (Momentum Report 2005).

Together, the not-for profit sector, foreign investors, the private sector¹², and federal and provincial governments now account for \$5 billion or 54 percent of total investments in university research. Universities themselves provide the remaining 46 percent of funding through internal allocation of monies to support the research effort (Momentum Report 2005).

Universities also facilitate collaborative R&D by participating in federal granting agency initiatives that actively promote cross-sectoral research activity. These include the Collaborative Research and Development grants and the Research Partnership Agreements at NSERC; the Major Collaborative Research Initiatives, the Aboriginal Research Grants, and the Community-University Research Alliances at SSHRC; and the Collaborative Health Research Projects and institute-led initiatives at CIHR.

4.6.4 Community-University Research Alliances

The Community-University Research Alliances is based on an equal partnership between organizations from the community and one or more postsecondary institutions designed to jointly develop new knowledge and capabilities in key areas, sharpen research priorities, provide new research training opportunities, and enhance the ability of social sciences and humanities research to meet the needs of Canadian communities.

Each CURA's activities will include:

- a research component (short-term and long-term projects, action research, etc.);
- an education and training component (in the context of research projects, apprenticeships, activities credited as part of coursework, etc.); and
- a knowledge-mobilization component (workshops, seminars, colloquia, policy manuals and other publications, public lectures, etc.) that meets the needs of both academic and community partners.

¹² Altogether, more than \$5 billion worth of research has been conducted by universities for the Canadian private sector in the last decade, with private sector investments in university research more than doubling in the last seven years alone.²⁶ Included in these investments is private-sector support for more than 90 NSERC Industrial Research Chairs on campuses across the country.

4.6.5 Examples of activity

The Laboratoire de recherche sur la performance des entreprises at the Université du Québec à Trois-Rivières is assessing factors that affect small and medium sized enterprise performance. This research has led to the development of a tool to assist SMEs with decision-making by comparing management practices and outcomes with similar businesses. They have also developed a software program, eRisC, which identifies, assesses and manages main risk factors that could compromise the success of SME expansion, export and innovation projects. To date, approximately 600 companies have used these tools.

With the costs of implementing the Kyoto Accord in Canada estimated at about \$10 billion by the federal government, Canada needs to develop new approaches to reduce emissions and dependency on fossil fuel-burning technologies. New and reasonably priced sources of sustainable energy, improved methods for using current energy sources and enhanced conservation practices are required. Universities are contributing solutions by researching new technologies based on wind, solar, hydrogen, fuel cells, biomass and other sources, and by funding better ways of working with fuel and energy generation systems.

The University of Winnipeg's participation in a Community- University Research Alliance project is helping to reverse inner-city decline in Winnipeg. Since 2001, researchers and community partners have collaborated to sustain inner-city neighbourhoods through community capacity building, the development of community resources, policy interventions and mentoring. Working with the community and applying their research, they have created a Rooming House Tenants Association; negotiated an agreement between city officials and community stakeholders to identify priorities for renewal; and established a mentoring program for inner-city youth to foster life-skills, coping strategies and increased self-awareness.

Through the Canadian Language and Literacy Network, hosted by the University of Western Ontario, 30 universities work together with industry and government partners to develop programs and strategies for the seven million Canadians with language and literacy problems.

Through the University of Alberta-based Canadian Circumpolar Institute approximately 280 associated researchers conduct community-based and community driven projects. Recent collaborative projects include identifying northern wildlife conservation strategies, the creation of a teaching video on ethics in aboriginal health, and a longterm study of land recovery rates in the Mackenzie Delta designed to advise future environmental impact assessments in the area.

The youngest university in Canada is Cape Breton University (CBU), located on the island of the same name in eastern Nova Scotia. CBU was founded in response to demands for education from what was, in the 1950s, a burgeoning industrial population employed in the coal and steel sectors. As described in Section 5.4.5, the Antigonish Movement - a major engagement programme emanating from St Francis Xavier University (located in Antigonish, on the Nova Scotia mainland) - gave rise to adult education classes on Cape Breton, which in 1951 morphed into a university institute located near the principal town in the area, Sydney. This institute gained independent

status in 1982, being finally renamed Cape Breton University only in 2005 (Morgan 2004). CBU already has a substantial reputation for engagement in its own right, as briefly discussed in Section 5.4.5.

4.7 The Netherlands

The universities and university system in the Netherlands has evolved to have a distinctive social mission related to the peculiarly fragmented nature of the Dutch society. The first Dutch university, at Leiden, was created in 1575 by William of Orange after the occupation of the southern Netherlands and the suppression of Leuven University, attracting liberal and protestant refugees. Delft Technical University was created in 1846 by King William II as a means of promoting Dutch industrial competitiveness in the face of English market domination and the rapid rise of Germany. In 1880, the Free University of Amsterdam (nowadays the VU University) was created by Abraham Kuyper to provide education opportunities for Calvinists who felt disempowered by the more mainstream ancient universities. In the 1920s, Catholic emancipation and ‘pillarisation’ including creating two new Catholic Universities at Tilburg in the south, and Nijmegen in the East.

The Nyenrode Business School was created after WWII by Dutch business leaders, including the founder of KLM Albert Plesman to create a new business elite to help Dutch multi-nationals compete more effectively in increasingly Anglophone marketplace. Two new technology universities were created in the 1950s and 1960s in Eindhoven and Enschede to educate the workforce for an economy that the Dutch Ministry of Education would be dominated by the need for new knowledge. The tapestry of new universities was completed with the opening of the University of Maastricht, in the far southern mining belt of Limburg, meeting the national demand for new doctors with an eighth medical school embedded within a civic university.

Despite this apparently clear relationship between the higher education sector and the social mission of universities, there has long been a feeling that HEIs in the Netherlands never adequately prioritised societal engagement (with business, communities and the third sector). Both technical universities at Eindhoven and Enschede established themselves in the mould of the established, elite Delft institution, and hired a mix of existing and aspirant professors as well as industrialists to rapidly create a new professoriat. Although the all ‘new’ universities since the 1880s had societal missions, these missions were seen as being discharged through their existence and behaviour as elitist, ivory tower institutions.

In the 1950s and the 1960s, the Dutch universities were active participants in the reconstruction efforts through their participation in the Dutch national innovation system. Dutch universities worked closely (and often in a way perceived as secretly) with leading national companies, the most notable case being the tight relationship between Philips and Eindhoven Technical University. The Dutch higher education system experienced the same generational shift in the late 1960s as a post-war generation came of age and challenged their societies and the vested interests which they saw as excluding them from effective democratic participation. The Netherlands saw the rise of a number of movements which sought to directly rather than politically challenge existing power structures, and in particular, the perceived close relationships between universities,

government and industry underpinned by opaque university self-government arrangements.

Perhaps the best known example of this shift and its consequences for the university system was in France in 1968 with the occupation of the Sorbonne and the declaration of solidarity between student leaders and striking trade unionists. The Netherlands experienced its own period of turmoil culminating in 1970 with the occupation by student activists of the Ministry of Education. This occupation was successful in the sense that it led to a reform of university governance structures, a streamlining of executive bodies around a small term-limited executive board and a supervisory board including elected members from both staff and student constituencies.

The effect of this on university engagement activity was marked, and in particular the 1970s, as much as in Finland, was a lost decade for university engagement. There was a feeling that businesses did not belong on a campus, and the early experimentors in university entrepreneurship reported their business contacts being on occasion physically thrown off the campus by student activists. However, the universities remained an important focus for social activities by students and it was from the student body that some of the important later initiatives were to emerge. As the Dutch disease of the late 1970s injected a sense of realism into the necessity for more effective and less rhetorical engagement by universities, the ground was laid for an increase in universities' societal roles.

4.7.1 The legal basis for Dutch universities' engagement

The legal obligations on universities (the 14 institutions awarding bachelor, masters and doctoral degrees with a strong emphasis on scientific research) are established by the so-called WHW or Law for Higher Education. In article 1.3, specific societal missions and engagement are envisaged for both universities, and the universities of professional education (HBOs, Polytechnics).

“1. Universities are responsible for the provision of scientific education and undertaking scientific research, in every case ... contributing knowledge for the benefit of society

2. Polytechnics are responsible for the provision of higher professional education, and can undertake research associated with their educational offer. In every case ... contributing knowledge for the benefit of society ...

4. Universities, HBOs and the Open University are required to consider the needs of the individual's self-fulfilment and the promotion of a sense of societal responsibility amongst their stakeholders.” (WHW, 1992, Art 1.3)

This requirement for a so-called “third mission” in universities and HBO-sector institutions has played out in very different ways in the two sectors. In universities, where there are substantial income streams associated with the first and second streams (teaching and research), university attention has been focused on activities which carry substantial and recurrent funding streams, such as those offered by the European Regional Development Funds (in eligible regions) as well as from the Ministry of Economic Affairs.

Alongside this, the vocational school system has faced much pressure in the last half century to rationalise what was a very fragmented tapestry of local colleges, conservatoria, and academies into larger institutions more directly focused on the needs of the sectors they service. In the last decade, the *Hogeschool* sector has also received a direct responsibility through the creation of the rank of Associate Professor, responsible for organising ‘knowledge circles’ linking students, lecturers and employers through project and consultancy work.

4.7.2 The good practice of engagement by Dutch universities

It is clearly dissatisfying that the strong social roots and values of many Dutch higher education institutions has not translated smoothly into a significant social impact of the HEIs on Dutch society. A key motivation of the Dutch education and science ministries has been to increase this impact through a range of policy measures. Progress has not been straightforward, in part because of the unpredictability of the reactions of institutions to new demands placed on them. One hallmark of more successful schemes is that they have not sought to impose engagement as an additional mission, but supported the particular vectors through which various university assets interact with social actors and

The Dutch were one of the first governments to have an active interest in the creation of spin-off companies, particularly as a mechanism for diffusing university knowledge into less innovative businesses. The University of Twente pioneered a graduate entrepreneurship scheme to support graduates, working with an academic mentor and business advisory, to create companies to sell consultancy and technical services to its local businesses. This model, initiated in 1984 has survived to this day with around 15-20 companies created every year. There has been throughout this period that the real impact of these spin-outs are not through direct employment creation in the spin-offs, which often remain small, but the impact which they have on their local customers, who ‘consume’ university knowledge without the well-documented frustrations of working with professors.

An instructive example of failure is in the attempts of the Dutch Ministry of Economic Affairs to encourage business engagement by universities in the early 1980s. Enticed by the promise of the early successes at the University of Twente and a number of other institutions, a 5 year grant was provided to all universities to encourage more liaison and exchange with industry. The problem with this fund was that it led to the creation of dedicated exchange offices which were not seen as important by the institutions, with all but one of those university offices closing at the end of the five year grant period. It was only the University of Twente, which invested the grant in running its graduate entrepreneurship programme, rather than on staff costs, which was able to continue its Liaison activity after the late 1980s.

Another example of highlighting how a focus on the agents of engagement rather than top-down institutional change can be important can be seen in the rise of the science shop movement (see box A below).

University/ Community Engagement example:- Dutch Science Shops

A 'science shop' is an office within a university, faculty or department which takes small questions from outside parties, and makes them available for students to undertake research projects on them. It is effectively a broker between a knowledge user with a specific demand, and a knowledge supplier willing to make that knowledge available for free or at very low cost (increasingly limited to students interested in having a socially useful dissertation subject). As Gnaiger & Martin (2001) note:-

"The science shop concept developed in Dutch universities during the 1970s. It emerged out of the students' movement, and included university staff who were critical of the status quo and wished to democratise the Universities. Their aim was to increase the influence of the civil society on the Universities, to make contact between citizen groups and scientists and to make use of the knowledge available at the universities." (p.8)

The idea of the science shop as a proven concept was popularised from the late 1970s onwards, Gnaiger and Martin linking this to the publication of an article in *Nature* magazine. De Bok & Mulder (2004) note that only three of the 14 public universities in the Netherlands lack a science shop, and that in two cases, universities have closed them because of continual budgetary pressures.

The science shop institution provides an access point to facilitate interaction between universities and communities, and can also play a role stimulating an interest in the idea, both within the university as well as within the communities. De Bok & Mulder note that they work best when they:-

- actively create linkages,
- helping clients to articulate questions from community groups,
- identify 'friendly academics',
- help define the student project,
- manage student participation,
- help to produce a 'community facing output' such as a newspaper article, and
- help exploit scientifically the resulting outcomes.

This system works most effectively when the teaching and research activity of the university has a need for students completing societal projects. In such circumstances, Science Shops help academic departments to fulfil their administrative functions in finding interesting and engaging projects and lightening the administrative burden. The rise of Bachelor/ Masters and the Bologna process is helping to encourage the conditions where more students are expected to undertake such socially-relevant research and helping to encourage the spread of science shops.

A third area where there has been some pressure to encourage innovation is to assist SMEs to work effectively with universities and absorb their knowledge. There has been a range of policy measures targeted at universities and the HBOs (Polytechnics). For universities, arguably the most successful approach has been the creation at a national level of an Innovation Voucher for eligible organisations – SMEs and social enterprises – which provides €7,500 which can be spent in any eligible research centre (university or public research laboratory). The idea behind the voucher scheme is to create a link between SME and knowledge provider, and help each to learn more about the other, to make both more effective at knowledge exchange and to increase Dutch innovation

performance. Another example is the creation of the Associate Professor posts (*lectoren*) within the Universities of Applied Science (the HBO institutions) (see box below).

University/ Community Engagement example: Associate Professors at Universities of Applied Sciences

The 1992 WHW (Law on Higher Education) established that the *Hogescholen* (Polytechnics) in the Netherlands did not have a formal role in the delivery of research, and were primarily teaching institutions. This can be seen as a historical inheritance from their background as applied/ vocational institutions, educating at a higher level. As the kinds of higher vocational courses which they offered evolved in the context of the knowledge economy, the sector became a higher education sector without a research base. This was further encouraged by the Bologna process in which in the Netherlands, the HBO was reformed to lead to a bachelor degree which in turn gave access to Masters level education at universities. These pressures called into question the notion that the sector should not be underpinned by a research base, although there was a strong pressure from the university sector not to dilute their blue skies research income.

The Ministry therefore chose for a more gradual approach, which is currently underway, to develop knowledge transfer and applied research capacity in tandem within the HBOs without impinging on core university scientific budgets. This was done by encouraging HBOs in the first instance to become involved with consultancy and applied research, and providing them with funds to build capacity in this area. The Ministry for Economic Affairs created the Associate Professors (*lectoraten*) programme in 2002 as an experimental programme. The programme has grown to date to encompass 350 *lectoraten*, with every HBO represented, and a total annual budget of over €50m.

The *lectoraten* fulfil a number of tasks within the HBOs, alongside their role as figureheads in raising the profile of research activity within the institutions. The first is that they undertake applied research by developing links with local businesses and business groups, public and voluntary sector organisations, on a commercial basis. Secondly, they act as a voice for outside interests in the development of their curriculum area within the institution, and help to orient the curriculum and the practical work elements towards regional stakeholders. Finally, they operate knowledge circles (*kenniskringen*) which are akin to research groups within universities and which can also involve researchers from external organisations on a part-time appointment basis.

An interim evaluation published in 2005 identified ten critical success factors for *lectoraten*, the conditions which must prevail within the institution in order for the project to succeed.

1. *Lectoraten* must have a sufficiently senior position and adequate financial stability within the HBO to undertake their position effectively.
2. *Lectoraten* must be both visible and central in the HBO's strategic policy
3. The choice of the lector's thematic area must be based on detailed evaluation analysis of internal capacity and external business demand
4. Knowledge circle members have a 40% appointment for 4 years and are appointed through a formal applications process

5. *Lectoraten* are intensively involved in developing curricula and supervising graduation projects
6. Teachers' professional level is structurally raised by lector activity
7. HRM functions internally are changed to facilitate the lector and their career path
8. *Lectoraten* have sufficient resources, supplies and services within the university as a condition of their post.
9. The *Lectoraten* manage active internal and externally-facing communications strategies
10. The *Lectoraten* link the HBO's research with other national and international partners.

Source: SKOHBO (2005).

The experience of the *lectoraten* programme highlights the importance of placing engagement centrally within universities, and ensuring that the people charged with it have the practical necessities to concentrate their efforts on engagement. In this case, this has been provided at a number of levels, from the national policy, through the support of the representative organisation for HBOs, through a specific foundation for building the research task in HBOs, to particular HBOs willing to undertake and reflect on the experimental policy. The approach would not necessarily succeed everywhere, particularly where the barriers to this kind of central role within the institution could be guaranteed, as there are many examples (*cf.* Clark, 1998) where the peripherality of such activity compromises its impact.

A fourth government response to the perception that universities have not been sufficiently interested in engaging in problems of pressing societal and economic concern has been the creation of the so-called leading research institutes. These six organisations have been set up to co-ordinate research efforts between the university and corporate sectors in six fields seen to be of direct concern to Dutch society. These are telematics, food sciences, materials and metals (economic) and health and aging, urban development and international law (social). These institutions have actively engaged with universities and have provided a means for a very disparate and incoherent set of demands and interests from user groups to be resolved into something recognisable as a knowledge request to a university. These organisations have invested in university and internal knowledge development projects. Their success is that these bodies are now regarded by universities being comparable providers of research funding to the established scientific funding bodies NWO (the Dutch Science Council) and STW (the Foundation for Applied Research).

One debate which has not yet successfully been resolved in the Netherlands, and which serves as a warning at oversimplifying the task of making engagement a core university mission. Since 2004, the Education Ministry has promised to create a permanent third stream of funding available for universities, similar to HEIF in England, once suitable indicators for impact can be found. The ministry has not been able to satisfy all stakeholders, particularly from the Humanities and Social Sciences, which regard many of the proposed indicators as too related to medical and engineering sciences (such as license income). This remains an apparently intractable debate.

The Dutch case study is interesting because for historical and institutional reasons, there has been a very pragmatic approach taken to encouraging impact without making it central to university missions. On the one hand, a very motivated professoriat and student body have undertaken significant numbers of relatively small scale engagement activities through their research, social and cultural activities. On the other hand, there have been a relatively small number of well-funded and high-impact programmes, notably the Leading Research Institute programmes, to try to encourage universities to take their engagement activities seriously at an institutional level. Although there is an attractive argument to be made that these two elements should mutually reinforce one another, there has been as much interference between the two elements as constructive input, and in particular, creating top down instruments to support grass-roots engagement has proven as difficult to achieve in the Netherlands as it has in other countries.

4.8 latin america

4.8.1 Historical perspective: the *Movimiento de Córdoba*

The university sector in Latin America has a very long heritage, which easily bears comparison with its European counterpart. Higher Education institutions were amongst the earliest entities to be established in the wake of the Iberian conquests of the continent¹³. For instance, the Universidad de Santo Tomás de Aquino in Santo Domingo (in what is now the Dominican Republic) was established by a Papal Bull dated 28th October 1538. Within a century, universities had been established in (what are now the countries known as) Mexico, Peru, Colombia, Ecuador, Chile, Bolivia and Argentina. The first university to be established in the latter country was the University of Córdoba, founded in 1621. As many of the earlier foundations did not survive, the University of Córdoba is now the second-oldest university in South America. It was precisely here, in the year 1918, that a movement began which was to have lasting repercussions for the conception, constitution and activities of universities throughout Latin America down to the present day.

The roots of the issues that came to a head in the events of 1918 lay in the centuries-old power structures of the colonial oligarchies which were based on an absolute identity of interests between Church and State. In an environment of minimal suffrage, where the government only represented the interests of wealthy landowners, the Church has a virtual monopoly on the provision of education, which in turn was largely restricted to the children of the wealthy. A few brave attempts by radical clergy to extend education to the poorer sections of society - such as the well-known *Reduccionnes* established by the Jesuits amongst the indigenous peoples of a region which straddles what are now parts of Paraguay and eastern Bolivia – were suppressed, often violently. Restricted access to Higher Education remained the norm throughout the continent into the early 20th Century.

A shift in class consciousness has been reported from many countries worldwide around 1918. This is widely believed to have been inspired by a combination of news of the 1917 Bolshevik victory in Russia, and of news of the futility of mass slaughter in the trenches

¹³http://es.wikipedia.org/wiki/Anexo:Universidades_y_colegios_en_Am%C3%A9rica_Latina_anteriores_a_1810 (last accessed 2-2-2009)

of World War I. In Argentina these events of global significance happened to coincide with the ascension to power of the first left-wing government the country had ever experienced (Aquino Febrillet 2006). Long-simmering irritation at the elitist nature of higher education came to the boil at the University of Córdoba, when radicalised middle-class students petitioned the university authorities for changes in the governance arrangements of the institution. When these petitions were dismissed out of hand, passions became inflamed and the student protest intensified. An all-out strike was organised, and the impromptu leadership of the nascent movement began to make ever more radical demands. They drew inspiration from the then-fashionable philosophical currents of positivist modernism (Cancino ?). The students' aspirations were eventually codified in a document now known as the *Manifiesto de Córdoba*, which included the following demands (Aquino Febrillet 2006¹⁴):

Demands of the *Manifiesto de Córdoba*

| | |
|---|---|
| <i>Autonomía universitaria</i> | University autonomy (i.e. from Church / State) |
| <i>Elección de los cuerpos directivos y de las autoridades de la universidad por la propia comunidad universitaria: profesores, estudiantes y graduados</i> | Election of the University Council, Senate etc by the university community itself: academics, students and alumni |
| <i>Concursos de oposición para la selección del profesorado y periodicidad de las cátedras</i> | Transparent processes for the selection of academic staff, and time-limited Chair appointments |
| <i>Docencia libre</i> | Academic freedom for teaching staff |
| <i>Asistencia libre</i> | Academic freedom for students |
| <i>Gratuidad de la enseñanza</i> | Teaching to be free of charge |
| <i>Reorganización académica que incluya nueva escuelas y docencia activa</i> | Academic reorganisation to include new disciplines and active models of teaching |
| <i>Asistencia social a los estudiantes</i> | Social assistance to students |
| <i>Democratización del ingreso a la Universidad</i> | Democratisation of admissions processes |
| <i>Vinculación de la universidad con el sistema educativo nacional</i> | Linking of the university system to the public education system |
| <i>Fortalecimiento de la función social de la Universidad</i> | Strengthening of the social contribution of the university |
| <i>Proyección de la cultura universitaria al pueblo y preocupación por los problemas nacionales mediante la extensión universitaria</i> | Extend university culture to the population as a whole, and concern with problems of the country through university engagement. |
| <i>Unidad latinoamericana y lucha contra las dictaduras y el imperialismo.</i> | Latin American unity and struggle against dictatorships and imperialism. |

¹⁴ English translation by P L Younger

The *Manifiesto de Córdoba* has since acquired something of the status of a ‘founding declaration’ for universities throughout the continent which are committed to more democratic forms of recruitment, teaching and internal management. When the students’ demands won the support of the left-wing government of the day, the university authorities capitulated, and the University of Córdoba shed its ecclesiastical and oligarchical ties, to become the first of many ‘autonomous universities’ in Latin America. Inspired by this example, autonomous universities soon sprang up in Perú (in 1919), Chile (1920), Colombia (1922), Cuba (1923), Paraguay (1928), and thence after throughout Latin America. These autonomous universities are constitutionally characterised by each having its own “*Ley Orgánica*” (organic law), which guarantees its independence from control by the Church and/or State; academically, they are characterised by a far greater commitment to engagement than their forerunners, or (with some honourable exceptions) than the surviving traditionally-constituted universities.

4.8.2 Latin American engagement practices today

The Neoliberal Tendency: *la difusión de innovaciones*¹⁵

Just as in the case of recent developments in UK universities reviewed in Section 4.4.3, there is a strong current of engagement in Latin America which focuses solely on (largely uni-directional) knowledge transfer to businesses, and the commercialisation of university intellectual property through patenting and the establishment of spin-out communities and the like. In the case of Latin America, the models adopted to date for this ‘*difusión de innovaciones*’ have tended to be very heavily influenced by US thinking. Not surprisingly, given the stark historical differences between the northern and southern continents of the Americas, uncritical adoption of models that work well in Boston or the Bay Area does not guarantee success in Bogotá or Buenos Aires.

With the resurgence of the Latin American Left over the last decade, the validity of applying US models in such different socio-economic circumstances is increasingly under question (e.g. Azócar 2006). More recently, with the global economic slowdown being widely heralded as the *dénouement* of neoliberal ideology, the intensity of questioning has increased, as evidenced by discussions at the November 2008 *Congreso Latinoamericano de Extensión Universitaria*¹⁶, held at the National University in Costa Rica. Although many case studies presented at that Congress did indeed focus on commercial outreach, many more related to more integral socio-economic development projects. Moreover, those few presentations that considered the epistemological basis for engagement laid heavy emphasis of the Freirean model to which we now turn.

The Freirean Tendency: *Extensión Crítica*

A more socially committed model of engagement is now enjoying widespread application throughout Latin America. This model draws inspiration from two sources:

¹⁵ This is the phrase used by Tommasino *et al.* (2006) to describe this tendency in Latin America

¹⁶ www.una.ac.cr/cle2008/ (last accessed 11-2-2009)

- (i) The democratic approaches to education proposed in the *Manifiesto de Córdoba*, (Section 4.8.1)
- (ii) The theories and *praxis* of transformative education developed by the late Paulo Freire (1921 – 1997), which were first outlined in his classic book *Pedagogy of the Oppressed* (Freire 1970), and subsequently developed in a series of other works, culminating in *Pedagogy of Hope* (Freire 1994).

The current understanding of this model has been developed by a decades-long iterative process of reflection, action, reflection, further action etc. A recent succinct statement of the Freirean model is given by Tommasino *et al.* (2006), who describe it as¹⁷:

“a wide range of practices (initially) developed in the rural environment in Latin America, which have their origins in a critical view of the social structure. These practices came to be implemented, fundamentally, after the establishment of the classical ‘knowledge transfer’ model of engagement, (in contrast to which) they aim to modify the structural base of society and / or the structural and social limitations which affect the people involved with the work.

This array of practices has benefited enormously from the work of Paulo Freire. The central theme of all of Freire’s work is the full development of the dominated human being in their struggle to overcome this domination; a struggle which will clear the way to a new society, developed and in development; an “utopian” society, “reinvented” and being reinvented continually; a society of which ordinary people will be the true constructors, and in which its members will be constructional elements of history”

In practical terms, the implementation of a Freirean concept of engagement leads to practices such as the “participatory social accompaniment” model exemplified in the case of the Isla Venado development project in Costa Rica, which is outlined in Section 5.4.5 below (see Ruiz Bravo *et al.* 2008).

Other novel practices which arise out of this avowedly democratic approach to the generation and sharing of knowledge include a wide array of adult- and distance-learning initiatives, and “*cátedras libres*”. The latter – which can be translated as ‘Open Chairs’ – are an unknown concept in Anglophone academe. Essentially, where a traditional Professorial Chair is invariably occupied by an individual, in the case of an Open Chair the idea is to sustain over time a clear academic focus on one or more specific areas (such as a traditional Professor might well do as an individual), but without any one human being employed as the occupant of the Chair. Open Chairs are described by Gomez (2001) as follows¹⁷:

“ ... Open Chairs are academic units of universities or higher education institutes which are not committed to development in conformity with a pre-agreed curricular design, or with ordinary academic / administrative regulations or norms. On the contrary, they offer a space for free discussion of knowledge, defending the right to hold any idea or opinion, ensuring creativity, freedom of

¹⁷ Translation from Spanish original by P L Younger

thought, expression and accordance / discordance in the production of knowledge, thus encouraging the generation and role of the latter in Latin America. In this educational space, particular attention is given to the knowledge of communities, be these local, regional, national, continental or international.

Academically, in addition to strengthening free thinking, Open Chairs facilitate unconstrained action in university teaching research and engagement. The organisation of Open Chairs proceeds with the participation of universities, community groups, NGOs, community radio stations, the local press, educators of all kinds and professionals from diverse fields of knowledge. The theme addressed by the Open Chair is analysed and reflected upon, yielding a transformative action which brings some benefit to this organizing community, promoting its social integration.

As such, the Open Chair facilitates the integration of academe with society, generating opportunities for the inclusion of people previously marginalized from higher education by traditional structural arrangements. Open Chairs tend to be coordinated by university academics with recognized skills in specific fields of art, science, technology or in areas of popular interest ... [Open Chairs are] characterized by flexible coordination, delivered by a group of people, usually professionals from diverse thematic areas. ... Basically Open Chairs contribute to the development of socio-political consciousness, free-thinking, the revaluation of academic knowledge, and the raising of sensitivity towards problems or themes of common interest in the countries of Latin America.

This is why, in the planning of these Chairs, active participation of all interested parties in the identification of the thematic area(s) for a given Open chair is always sought, with a view to achieving a true spirit of interaction, both within the Chair, and in wider society, both near and far ...". (Gomez 2001: 210-211).

Critics of the Freirean school of engagement often suggest that the democratization of higher education leads to a drop in intellectual standards. Freire himself articulated a response to this charge:

“ ... At bottom, the university ought to revolve around two basic concerns, from which others derive and which have to do with the circle of knowledge. The circle of knowledge has but two moments, in permanent relationship with each other: the moment of the cognition of existing, already-produced, knowledge, and the moment of our own production of new knowledge. While insisting on the impossibility of mechanically separating either moment from the other - both are moments of the same circle - the role of any university, progressive or conservative, is to immerse itself, utterly seriously, in the moments of this circle. The role of a university is to teach, to train, to research.

What distinguishes a conservative university from another, a progressive one, must never be the fact that the one teaches and does research and the other does nothing ... The universities with whose rectors I worked in Buenos Aires held this same conviction. None of them was making any attempt to reduce the self-democratization of the university to a simplistic approach to knowledge. This is not what they were concerned about.

What they were concerned about was to diminish the distance between the university, and what was done there, and the popular classes, without any loss of seriousness and rigour ... I was actually surprised by the innovative élan with which the universities were hurling themselves into the effort of their own recreation” (Freire 1994, pp. 169 - 170)

4.9 University engagement within national HE systems

Although the eight university overviews provided above do on first reading appear to be rather divergent in terms of the messages that they provide for university engagement, on closer reading there are a number of clear messages emerging from comparative reading of the case studies (summarised in table 3 below). Firstly, engagement is a common characteristic (requirement) of HE systems, even those in which there is seemingly an emphasis on detachment and excellence. Secondly, universities themselves have played significant roles in building up a willingness amongst social partners to demand more engagement, so universities have actively successfully constructed their societal roles. Thirdly, despite the current pressures towards marketisation and competitiveness, clever policy instrument selection can encourage societal as much as commercial engagement by universities. Finally, engagement is a process not an outcome, and effective engagement requires continual adaptation by policy-makers and HEIs to the wider political and economic pressures to which HE systems are inevitably subject.

The first common point to emerge is that these empirical examples reinforce the point made earlier that engagement is an almost inevitable consequence of higher education systems. In none of the eight national systems surveyed have universities been either detached “ivory towers” or national “graduate factories”. What is also noteworthy is the fact that engagement has been remarkably adaptive as a mission to changing external circumstances. So recession and structural adjustment have not led to the abandonment of engagement missions, but rather, its reinvention to fit the mood of the changed times. Although engagement may not be a strategic mission for universities, there is strong evidence that societal engagement is part of the natural ‘inclination’ of universities.

Secondly, part of this resilience emerges from the fact that universities have been active in taking the initiative to be engaged, both out of pure self-interest but also out of a wider inclination towards engagement. Examples from a number of systems show how universities have taken small, tokenistic instruments (such as the Finnish university colleges idea) and made them work, using small additional sums for engagement to leverage teaching and research funds to create quite significant societal impacts. Whilst we should not be surprised that universities are joining up these different funding streams – cross-subsidy being the hallmark of universities’ institutional successes, this also emphasises that there are circumstances under which engagement activities are the ‘key’ which allow universities to unlock all kinds of other activities which help serve their core institutional missions.

The third commonality is that despite the problems outlined above in identifying KPIs for engagement, it is possible to develop clever instruments which help to stimulate engagement. Some of those simply make funding dependent on engagement, such as the

CURA, which makes blue-chip research council funding available for universities who develop a community involvement programme for core research strands. However, other lighter-touch (i.e. cheaper) instruments can also stimulate engagement. Such measures typically involve a strong governmental declaration that engagement is desirable, seed-corn funding with a threshold rather than competitive arrangement, flexibility in use of funding to fit with regional needs, and a formative rather than summative assessment process.

The final issue that the case studies make is that engagement is a process not an outcome. This truism can be decomposed into two further truisms, namely “there is nothing new under the sun”, and “times change and we must change with the times”. The first is that engagement has been seriously undertaken by universities in a manner analgous to contemporary discussions for over one century. Kellog argues for a ‘returning to our roots’, and a strong historical memory is important to remember the lessons that have already been learned about engagement, and not to assume that because of new pressures of globalisation, marketisation and the grand challenges, that an entirely novel approach is necessary to engagement. These factors must be taken into account, however, and the second component of engagement is that remaining world-class in engagement requires a sensitivity and reactivity to external pressures. A key issue here is in affirming the importance of engagement, and not placing it in the ‘too difficult’ box, which is effect a denial of a key element of the natural tendencies of universities, namely to engage critically with the societies of which they are part.

These factors take on a renewed significance in the context to which this report is addressed, namely for universities seeking to be world-class in nature. Firstly, it seems to suggest that being a world-class university involves a degree of societal engagement as part of the natural institutional inclination. Secondly, it emphasises the need for institutional pro-activity in creating as much an environment and HE system where engagement is valued, as in responding to the incentives from Treasuries and Science Ministries to undertake engagement. Thirdly, KPIs for engagement are problematic, and so the world-class engaged university is likely to adopt a more formative rather than summative approach to performance managing engagement. Finally, the world-class engaged university is not – as any world-class institution or businesses will be – complacent.

We will return to these factors in the final chapter, which explores the process of becoming world-class in terms of engagement. In order to provide more detail of the spectrum of activities which constitute university-societal engagement, in the following chapter we turn to look at good- and best-practice engagement examples. Firstly, we develop a typology of engagement activities, and then we look at concrete examples through which university Community Engagement is delivered.

Table 3 A summary of the emergence of engagement activities in a range of national HE systems

| | Traditional societal role | Key recent reforms | Approach to engagement | Key policy frameworks | Innovative approaches | HEI responses | Challenges/ barriers |
|----------------|---|---|--|--|---|--|--|
| Finland | Strong national HEI entitlement system | Concentration of competence/ non-state shift | Regional HEI partnerships in networks | Increasing centralisation of HEIs in core HI | University centres – regional confederations | Creation of new (research-led) college centres | Mainstreaming colleges beyond project life |
| Germany | Independent institutions led by professors | The creation of ten super-universities | Encouraging industry/ firm engagement | Regional innovation systems policy | New networks of universities, firms, VC, gov. | Vary at state level (Länder policy key) | Reifying engagement not core T&R |
| Spain | Providing elite for empire/ nation-building | Decentralisation post dictatorship | Always very sympathetic to societal mission | Decentralisation: new university tasks welcomed | Universities as key regional institutions | Reactive to new opportunities for funding | Universities not giving societal leadership |
| United Kingdom | Duty: useful, responsible autonomy | Dearing: mass, diverse HEIs with elite group | Beyond charity, commercial focus | Concentration, diversity, new colleges | Specific funding – HEIF and HE-ACF | High level of take-up, activity fits KPIs | What’s measured, matters; KPIs for engagement? |
| Australia | Stratified system: local institutions | Dissolution & reimposition of groupings | Driven by states seeking good local partners | National compact: \$\$\$ for results. | Bradley review: funding engagement | Smaller HEIs strongly/ well engaged | Excellence vs engagement phantom |
| Canada | Autonomous institutions, local flavour | Since 1996, new compact, \$\$\$ for results | Partners building better knowledge exchange | Huge increase in core scientific funds as result | Community/ University Research Alliance | <i>Momentum</i> report showcasing university results | Government shift: will ‘business’ replace society? |
| Netherlands | Agents of social expression and change | Encouraging useful benefits (using oil funds) | Raising social responsibility of stakeholders | Macro-programs (Nanoned); SME vouchers | Encouraging Polys to do applied research | Rising levels of income generation | Valorisation by arts, humanities, social sciences |
| Latin America | Explicit societal mission (duty) for students | Structural adjustment: push income earning | Universities as balance to strong (elite) church | Increasing Latin American leftist nationalism | Developing regional dimension | Adoption of Freirian Open Chairs | Sustaining HEI autonomy with recession/ slump |

5 PRACTICES IN ENGAGEMENT

In this section, we now turn to look at examples of universities which have devised new ways to engage with firms, the public sector, and voluntary and community sector organisations. There are a wide range of engagement activities undertaken by universities, which reflect wide diversity within the sector:-

- diversity between the national higher education systems, picked up to some extent in the previous section;
- diversity between different types of institution reflecting differences in the institutional mission;
- diversity in the context for engagement, and the demand which external stakeholders place on the HEI itself, and;
- diversity in the choices taken by the university, its management, staff and students about the way that they individually and collectively seek to engage with external organisations.

In this section, to capture some of this diversity of activity, we seek to look at a range of engagement activities undertaken by universities within these diverse national systems and institutional mixes. To do this, in 5.1 we develop a typology of university engagement activities, based on a classification of university activities in four main areas, namely research, knowledge exchange, service and teaching. In the remainder of this section, we then present some examples of practice in these areas.

It is difficult to be able to precisely identify what is good practice, because in the absence of an agreement on what constitutes good ‘engagement’, it is left to universities, university associations, research bodies and policy makers to devise their own definitions of good practice in engagement. There are clear dangers in asserting that what policy-makers argue is ‘good practice’, in seeking to encourage more universities to involve themselves in engagement, is in some senses exceptional. This is compounded for those areas, particular around the service mission of a university, where a vast majority of universities have long been engaged.

Where third parties, such as GUNI or OECD have argued that practices are good practices, then this is highlighted in the text. Otherwise, what follows is an overview and exemplification of activity. This helps to provide a sense of the scope of activities which are possible under the heading of engagement, and some of the issues which can face a university seeking to become ‘engaged’.

5.1 A typology for university engagement activity

In this typology, we are primarily concerned with engagement with harder-to-reach groups by universities. Here we distinguish two main groups, although there may be others. First are small businesses which traditionally have difficulty making themselves salient to university technology transfer offices and academics. Second are the third sector and community groups who do not necessarily structure their demands in ways that stimulate university responses.

The typology we offer here has been developed using a range of literature set out in the bibliography at the end of this note. For this typology we have divided up engagement along the lines of the kinds of tasks which a university undertakes (namely research, knowledge exchange, service, and teaching), and considered how each of these may involve active engagement with external partners (cf Benneworth *et al.*, 2009). The four main areas with which we are concerned are:-

- Research which involves engagement with external stakeholders as a core element of the knowledge generation process;
- Sharing existing knowledge between the university and external stakeholders, whilst developing new knowledge through shared co-learning;
- Delivering services to external groups which they find useful and/ or demand;
- Involving external stakeholders (small business and community) in teaching activities which meets their needs and improves teaching quality.

We acknowledge that this is a conceptual distinction between activities which may not always exist in practice. For many universities – such as small, rural colleges, former vocational schools or technical institutions – it is clearly artificial to draw a distinction between service and teaching, because of the importance of service learning to the curriculum. We emphasise that this is a conceptual typology, and in reality, particular engagement will be delivered through ‘bundles’ of activities in which the different kinds of activity are not easily distinguished.

For example, one could envisage a social policy research centre which undertakes a consultative evaluation project of an inner city mentoring programme involving using the lessons to create courses to upskill those mentors. In a single activity, which may appear as a single transaction, it is possible to identify the following activities (using the typology), R4 (research on groups fed back), K3 (capacity building), S2 (bringing groups onto campus) and T4 (CPD). Nevertheless, we argue that the typology does add value by identifying the breadth of activities by which engagement takes place and underscoring the fact that in practice, universities do deliver engagement wrapped up into other core activities. The typology is summarised in the table below:-

Table 4 A typology of different kinds of university engagement activity

| Area of university activity | | Main areas of engagement activity |
|-----------------------------|----|---|
| Engaged research | R1 | Collaborative research projects |
| | R2 | Research projects involving co-creation |
| | R3 | Research commissioned by hard-to-reach groups |
| | R4 | Research <u>on</u> these groups then fed back |
| Knowledge sharing | K1 | Consultancy for hard-to-reach group as a client |
| | K2 | Public funded knowledge exchange projects |
| | K3 | Capacity building between hard-to-reach groups |
| | K4 | Knowledge sharing through student ‘consultancy’ |
| | K5 | Promoting public dialogue & media |

| | | |
|----------|----|---|
| Service | S1 | Making university assets & services accessible |
| | S2 | Encouraging hard-to-reach groups to use assets |
| | S3 | Making an intellectual contribution as ‘expert’ |
| | S4 | Contributing to the civic life of the region |
| Teaching | T1 | Teaching appropriate engagement practices |
| | T2 | Practical education for citizenship |
| | T3 | Public lectures and seminar series |
| | T4 | CPD for hard-to-reach groups |
| | T5 | Adult and lifelong learning |

5.1 Engaged research involving external stakeholders

This is where the university undertakes research activities – creating new knowledge – in ways that involve, and benefit, external stakeholders. This may involve the following kinds of activity:-

5.2.1. Undertaking collaborative research

On a number of occasions the university and an organisation will sit down together to design, execute and exploit a piece of collaborative research. The examples below highlight the range of projects which are co-created the breath of engagement across community health, research and policy development, sustainability and business development.

De Paul University - Steans Center for Community-based Service Learning, USA.

DePaul University is the largest Roman Catholic university in the United States. Its Steans Centre for Community-based Service Learning provides a ladder of opportunities for social and civic engagement. Faculty members develop research projects in collaboration with community-based organizations – there are a number of community based research projects currently underway - <http://cbsl.depaul.edu/faculty/departmentInitiatives/nursing.asp>

University of Technology Sydney: Shopfront.

At Shopfront community projects are carried out by students under the supervision of their subject tutors. The process is collaborative: students and community groups are involved in all aspects of the project’s development and implementation. Projects are initiated by the community and can range from large, multi-disciplinary undertakings to small projects that involve one or two students. Projects have included web design and development, business and marketing plans etc - <http://www.shopfront.uts.edu.au/index.html>. The Science Shop model in the Netherlands performs a similar function <http://www.scienceshops.org/>.

Autonomous Metropolitan University (UAM) Mexico

Various activities are being carried out at the Autonomous Metropolitan University in Mexico to establish new forms of university-society relationships by linking university research, training and service activities with social priorities which can also be applied to other regions facing similar problems. An example is provided by the 'Strategy Workshops on Sustainable Human Development' whose areas of research have been defined in collaboration with social and non-governmental organisations and include nutrition, health and living conditions, the environment, education and human rights. These initiatives have led to the creation of local health care services and more managed sustainable development <http://www.guni-rmies.net/observatory/bp.php?id=20>

Competence Centre Programme – Sweden

The basic idea which underlies the Competence Centre concept is that collaboration between research groups and companies in joint R&D projects brings about mutual benefits. From 1998 to 2000, the budget for the Competence Centre programme was about 53 million euros, a third of this amount was contributed by each participating university. At present there are 28 Competence Centres at 8 universities and about 220 participating industrial companies who play an active role in their focus and development. The Competence Centres are specialised in the following research fields: (i) Energy, Transport, and Environmental Technology (8 Centres), (ii) Production and Process Technology (7 Centres), (iii) Biotechnology and Biomedical Technology (5 Centres), and (iv) Information Technology (8 Centres).

Many enterprises, especially the large international groups based in Sweden, are engaged in several centres. About 20 % of the industrial partners are small and medium-sized firms. A Competence Centre is concentrated at one university that undertakes to administer its activities, a Director is appointed by the university and a Board. The chairman and in most of the centres a majority of the Board members comes from industry.

Overall, evaluations of centres and programmes have been very encouraging - the intellectual calibre of the work was rated as world class or first class at the majority of the centres. The international experts were also impressed by the industrial involvement. <http://www.vinnova.se/In-English/Activities/Strong-research-and-innovation-environments/The-Competence-Centres-Programme-1995--2007/>

Chalmers, VOLVO and Materials Science: long term oriented mutual collaboration- Sweden

Chalmers University of Technology has a long history of collaboration with industry. It also has a well-established science park, Chalmers' Science Park, situated adjacent to the university campus. The majority of the facilities based at the science park, are the research units of large national and multinational firms like Volvo, Ericsson and SKF. Chalmers has a range of schemes to facilitate industry collaboration as well as the exploitation and commercialisation of research. These include: continuing professional development programmes; technology support schemes for SMEs; high-tech firm collaboration mechanisms; and university firm spin-offs programmes.

An example is provided by Volvo who approached Chalmers to provide training to meet specific workforce requirements related to Volvo's technology requirements. These

specific competencies were in the fields of: aerodynamics, sheet forming, automated assembly, noise reduction, tribology, combustion, exhaust catalysis, corrosion control and use of light alloys. Volvo invested in equipment, personnel and laboratory space that would allow Volvo staff and Chalmers academics to work together on the study of surface technology and develop training courses for work into this field. The co-operation has benefited both parties: for the university, the collaboration has brought real life examples from Volvo of modern engineering design problems and issues as teaching tools. For Volvo, it has allowed the firm to: use the university as a 'listening post' for wider developments in science and technology related to Volvo's activities. http://ec.europa.eu/enterprise/enterprise_policy/competitiveness/doc/final_isr_report.pdf

5.2.2. Involving external organisations in existing research

The involvement of external partners in university research is not an unusual process, and there has always been a close link between some parts of universities, and businesses and government. Where this is most interesting in terms of good practice is where there is a move from researching together to co-learning and common agenda setting. This necessarily involves shared interests in the partners in developing knowledge elements and frameworks that can collectively and individually be exploited to bring benefits to all the participants in the programme.

Centre for Urban Policy and the Environment, Indiana University-Purdue University

Wiewel & Knapp (2005) argue that one area where these collaborations and processes of co-learning have emerged in recent years have been in US universities' research centres in the field of urban studies. They ascribe this to the increasing emphasis placed by federal programmes such as the Department of Education's University-community partnership programme and HUD's Community Outreach Partnership Centre programme. They note that centres such as the National Centre for Smart Growth at the University of Maryland and the National Centre for Neighbourhoods and Brownfield Redevelopment at Rutgers University, New Jersey, have been very active in involving local agencies and authorities in their research programmes to improve the quality of local decision-making.

One good example of a university research centre taking an active role in this process is given by the Centre for Urban Policy and the Environment, at Indiana University-Purdue University. The significance of its involvement emerged when the State Government decided to abolish the State Planning Services Agency, which left a considerable gap around planning knowledge in Indiana. Together with two partner organisations, the centre undertook three main programmes, involving staff and student researchers as well as significant local involvement. There were a number of significant outcomes, including a database of land cover for the state, the Land Use in Central Indiana model, as well as a number of conference papers subsequently converted into journal articles. As Lindsey *et al.* note, "the three primary products of the collaboration ... are the results of decisions made during the collaborative process, to address explicit needs for information and tools to improve the range of land resources in the state, and they illustrate the adaptive nature of such a process" (p. 111-112). Source: Lindsey *et al.*, 2005.

University of Victoria, Canada: community-based participatory research

The Centre for Community Health Promotion Research (CCHPR) at the University of Victoria in Canada exemplifies the university's commitment to community based participatory research as one of its core competencies, which Hall & Dragne (2008) cite as best practice. The university has established an Office of Community Based Research, "a community–university partnership which supports community engagement and research to create vibrant, sustainable and inclusive communities". The Office is a result of a strategic decision to emphasise community-based research at the University of Victoria, and is supported by the University Vice-President for Research. Activities established through the Office include the Community Based Research Laboratory in the Geography department, and the Aboriginal Health Research Group.

The CCHPR embodies the UVic approach towards community based participatory research, mixing research, education and knowledge translation in its portfolio of activities. CCHPR uses a Community-based collaborative action research approach, with collaborative action research as the most commonly used methodology. CCHPR has a strong research portfolio and involves fifteen staff in the prosecution of collaborative action research projects. CCHPR also involves a network of 80 associates beyond the centre (in the university, health care and voluntary sectors) involved in the research, and a network of affiliates, including multilateral organisations who use the research findings in their own activities, such as the Canadian Consortium for Health Promotion Research, the International Union for Health Promotion Research and Education (IUHPE), the World Health Organisation European Office, and the Pan American Health Organisation. Source: <http://web.uvic.ca/chpc/>

5.2.3. Directly commissioned university research

Another manner in which universities become involved with societal demands for knowledge is when particular organisations state those demands explicitly and universities then respond. Although the model is often assumed, of universities having the state-of-the-art knowledge, in many cases, firms and governments' own innovation activities drive this demand, and universities use their conceptual knowledge to gain a fresh insight into ways the problem could be solved. The main constraint on this process is in funding – large firms and government have resources available to fund universities to undertake research on their behalf, and more recently, the third sector has also become an increasingly important research funder, particularly in medical research.

The most interesting examples are where universities and other stakeholders have found mechanisms to fund universities to engage with less powerful stakeholders, often voluntary and community sector groups and small firms. These typically involve finding mechanisms to aggregate demand and interest from these relatively small, weak organisations to give them the capacity to pose questions in a way that universities find interesting, and the resources to pay for university involvement. The resources issue is not itself so interesting, as the pioneering Dutch Innovation Voucher scheme (*qv*) has demonstrated. What is necessary is to bring similar organisations together to create either research agendas or questions which are sufficiently interesting to stimulate university responses.

Innovation Platforms: the Öresund Science Region

The notion of user participation in the definition topics of interest in research programmes is a well-used tool within national and EU science policy, as the Japanese Fifth Generation Supercomputing programme, Alvey in the UK, and ESPRIT at the European level. What has emerged more recently is the idea of innovation platforms where universities, research laboratories, and innovative companies come together to design research programmes which generate knowledges which are more easily exploitable. This may be done nationally, as in the case of the Dutch and Finnish Innovation Platforms, or regionally as in the case of the Piemonte (Italy) Technology Platforms, the Twente Innovation Route, and the Öresund Science Region. The OECD (2007) identified the Öresund Science Region as an example of best practice in university engagement because it involved 14 HEIs in two countries with links to key sectors in that transnational region.

The OECD point to three of the platforms, in food, digital media and ICTs as being particularly noteworthy because of the high rates of participation by SMEs. This has allowed these platform organisations, underpinned by high university participation, to become a vehicle for the articulation of two things, firstly the existence of opportunities for readily exploitable research, and secondly, a willingness of businesses able to find commercial niches for that novel research. The platforms have been able to link their own analyses and discussion to other funding streams from the Swedish and Danish governments to help increase the commercial potential of the scientific investments made nationally.

MIT Industrial Liaison Office: clubs for SME support.

A second way to bring small and relatively weak research users together to articulate a common demand is through establishing ‘clubs’. This idea emerged in the early experiments undertaken by the European Commission around Regional Technology Plans, mapping the supply and demand for innovation knowledge in particular regions (Morgan, 1997). The main barrier to this process was in those regions where there was such a mismatch between supply and demand that there were no easy avenues for improving exchange between those two sectors (Fontes & Coombes, 2001).

The idea of ‘technological clubs’ emerged as a means of improving the match between firms and universities, on the one hand bringing firms together and providing a relatively straightforward learning opportunity for firms to appreciate what universities could bring. On the other, the clubs provide a direct and low-energy communicative channel between firms with needs and the university research base. The region of Twente in the Netherlands is one region with a number of these clubs, often initiated by the university then passed back to their membership, which have commissioned and supported university research, such as the Twente Technology Circle, Foundation Mechatronica Valley and the Virtual Reality Centre (Benneworth & Hospers, 2007).

The OECD (2007) highlight the MIT Industrial Liaison office as one such example of best practice which involves both first order community building and sensitising as well as offering opportunities to access university research linkage. The club is formed from member firms who pay a fixed fee and in return for that are able to access particular services. Some of those services are community-building, such as a monthly newsletter, seminars and university visits. Others are more specifically about building a bridge

between co-research ready firms and the university, such as a university directory of expertise and meetings with experts. The club is overseen by business managers who ensure that the members receive the best benefits for their membership.

5.2.4. Feeding back third-party research results

It is often the case that the university will undertake research on a community at the request of a third party funder (e.g. government, Joseph Rowntree Foundation) who has as its core mission for example to understand the causes of poverty or to improve the quality of life in disadvantaged neighbourhoods. In this case the beneficiaries are firmly at the centre of the research and the results are then fed back to the community. The aim of these programmes is to produce and disseminate research based knowledge that reflects the priorities of the community.

La Salle University (ULE) Colombia – improvement of housing

This programme began with an institutional collaboration agreement between the Caja de Vivienda Popular (CVP) (the public body responsible for low-income housing), the Curaduría Urbana N° 4 (the organisation that grants development and building permits) and La Salle University (ULS). The objective of the programme was to improve living conditions in some neighbourhoods in Colombia and to get the universities involved in helping to alleviate the problems. This agreement established two lines of action:

- Direct intervention by performing diagnoses and drawing up housing improvement plans.
- Supporting the renovation of precarious housing in outlying neighbourhoods.

The first line of action involved investigating the living conditions of every family living in the neighbourhoods and planning support. The second line of action involved the creation of a permanent Urban Observatory and Information Office, located at La Salle University, where low-income people can get legal advice. <http://www.guni-rmies.net/observatory/bp.php?id=54>

5.3 Sharing and co-developing knowledge with stakeholders

Sharing knowledge is a process whereby the university's existing knowledge base is exchanged with other actors for their benefit, and universities develop new academic knowledges drawing on stakeholders' wisdom and input. This knowledge may be shared and co-developed through the following kinds of activities:-

5.3.1. Consultancy activity

In this case the organisation is the client and pays for university expertise such as in the case of commercial consultancy. Consultancy enables University knowledge to be transferred to business and the wider community through the application of a staff member's professional expertise for the benefit of a third party; there may also be inflow of knowledge into the university and knowledge exchange. Examples include problem solving; research and development; laboratory work. Measures have also been taken to strengthen linkages between universities and business through for example Knowledge Transfer Partnerships (KTP). A KTP is a relationship between a company/organisation

and a knowledge base institution where the academic contributors apply their expertise to a project that is central to the development of their collaborative partner.

University of Stirling and Raploch Regeneration

Staff across the University of Stirling have engaged with the Raploch Urban Regeneration Company (URC) since 2005 on a range of projects of interest to both the University and the Company. Raploch is one of 3 URC's charged with community and stakeholder redevelopment of their respective areas through the engagement of private sector investment. The University is recognised by the URC as a site of important knowledge and facilities, and, in return, the URC provides the University with research and knowledge exchange opportunities. Recent activity supported by the University includes:-

- the development of 'Radio Raploch' – a community radio project that produces short programmes about employment in Raploch (with input from students in the Film and Media department)
- the compilation of an 'Information Repository' – documenting actions, approaches, decisions and documents of the URC to date
- the development of assistive technology solutions for people with care needs – funded by the Scottish Funding Council and involving researchers from the universities of Dundee, Edinburgh, and Glasgow as well as Stirling

UHI Millennium Institute, Scotland: Centre for Rural Health.

The UHI Millennium Institute links into over 100 learning centres across the H&I to deliver a portfolio of personal and professional modules and skills training at community level, largely through ICTs, covering the spectrum of access, certificate, diploma, undergraduate and postgraduate provision. They also serve as important sites of delivery of a number of national policy initiatives concerned with education, e-learning and skills as well as rural development. An infrastructure of leadership, management, partnership and support exists between the UHI and centres. Importantly some Learning Centres are/have been managed by local community groups, whilst the majority are staffed by local people. There is a sense of community ownership across the Centres. Student participation through the Centres is approximately 700 from an overall student population of around 7,000.

Staff within the Centre for Rural Health at the UHI Millennium Institute are involved in a 2-year 'Knowledge Transfer Partnership Project', 'Remote Services Futures', which 'aims to produce a toolkit of good practice for working with communities and stakeholders on remote community health service design'. Visits to 4 remote communities, two islands and two mainland areas, have sought opinion on challenges and solutions to current health care and service provision. The project is linked to national government policy covering health care and rural and remote health strategy. As part of this project a 'First Responder Scheme' was developed that involved a member of the Centre's staff and 16 members of his local community being trained to provide basic emergency care until paramedic services arrive.

5.3.2. Publicly funded projects

Projects to tackle marginalisation and social exclusion can also be addressed through publicly funded projects. These projects are designed and run in partnership with local community groups and in the cases identified below may be used to tackle the barriers to work faced by unemployed and disadvantaged people or can be aimed at projects designed to benefit the local economy.

University of Brighton: The Community University Partnership Programme

Originally funded by an external philanthropic trust for 4 years CUPP has initiated over 30 partnership projects since inception, and provided advice, training and consultancy to over 350 enquiries through its Research help desk. The Brighton and Sussex Community Knowledge Exchange was established within CUPP in 2004 which uses academic expertise to address significant community-based problems and creates real partnerships between the Universities and the community/voluntary/social enterprise/public sector organisations. As a model CUPP draws from a history of community university partnerships in the USA, and from Service learning initiatives across Europe and Canada. A number of projects can be mentioned. For example the development of a research and network development linking community and university practitioners interested in helping people with Aspergers Syndrome. The project has lead to substantial funding being secured from European Social Funds for the Social mentoring project, addressing barriers to employment for this group. <http://www.guni-rmies.net/observatory/bp.php?id=21>

Knowledge Impact in Society (KIS) Program: “Mobilizing knowledge for sustainable regions in NL”

Knowledge Impact in Society (KIS) is a three-year project funded by the Social Sciences and Humanities Research Council (SSHRC). It is a collaboration between the Harris Centre, the Rural Secretariat of the Government of Newfoundland and Labrador and the College of the North Atlantic.

The KIS project has two objectives:

- to identify relevant research projects and expertise within Memorial University and the College of the North Atlantic relevant to Regional Council needs
- to connect faculty, staff and students with the Regional Council board members and staff, as they develop their vision statements and objectives

5.3.3. Capacity building projects

The university may become involved in facilitating capacity building activities related to business or the community through building clusters for example or participatory planning activities within communities. In the case of clusters these may be focused around capacity building in certain sectors, health technologies, creative industries etc or a particular emphasis on SMEs.

Technical U. of Valencia (UPV) Valencia Nanophotonics Technology Center (NTC)

This is a research centre with an interesting story of university- enterprise relations through the acquisition, creation and research collaboration with enterprises.

University of British Columbia in association with Universities in Vietnam.

Building capacity for policy assessment and project planning. Overall Goal: To build self-sustaining capacity in the partner institutions to develop and teach low-cost, participatory policy assessment and project planning methods that are effective in generating appropriate solutions to localized poverty, and suited to Vietnamese cultures and administrative conditions. Capacity-building in the form of learning-by-doing through several Vietnamese institutions, took place from 1998 to 2003. It drew on financial support from the Canadian International Development Agency (CIDA) and cooperation with Universities of British Columbia and Université Laval. The general strategy was to enhance academic institutions' capacities to contribute to localized poverty reduction: first, by working collaboratively with local authorities and communities to strengthen local participatory policy assessment and project planning capacity through pilot projects; secondly, by reflecting on the experience through workshops; third, by disseminating results in curricular guides and texts.

The Green Network – Environmental activities at the University of Colima – Mexico

The Green Network brings together thousands of students and university staff from the five university campuses through organising and disseminating different events. In 2007, 13 volunteers gave 33 environmental education workshops, 26 of which were endorsed by the UdeC's Continuing Education Office. In addition, between October 2006 and 2008, leisure and cultural activities were carried out, such as exhibitions, photography and essay writing competitions, in which 1100 students participated. The Diploma in Environmental Leadership has been taught every year since 2006. The Green Network provides content and helps to coordinate the course, which is aimed at all young people who have an interest in environmental issues. In addition, the Network has formed several collaborative relationships with other organisations, such as Earth Charter International, the National University of Costa Rica (UNA), the Earth Charter in Guanajuato and the Department of Urban Development (SEDUR), through the Environmental Office of the Government of the State of Colima, among others. <http://www.guni-rmies.net/observatory/bp.php?id=132>

5.3.4. Knowledge sharing through students

The student body is a significant contributor to community activity through volunteering activities or through credit bearing activities where real-life problem solving is part of their studies.

University of Western Sydney- Learning through community service

20 credit point unit offered at the University of Western Sydney http://www.uws.edu.au/community/in_the_community/oue/learning_through_community_service

California State University - Monterey Bay

California State University - Monterey Bay was set up from the beginning to make community participation a core part of the learning experience. It serves a diverse student body with varied opportunities for them to serve their communities at every stage of their college career. CSUMB is the only university in California, and one of the few

nationally, to have made service learning a graduation requirement for all students. Last year, 1,600 CSUMB students enrolled in service learning courses, contributing nearly 57,000 hours of service to more than 250 schools, non-profit organizations and government agencies in the tri-county area. <http://csumb.edu/site/x11496.xml> (vision statement)

Federal District of Mexico City – the *Prepa Sí* programme

The Federal District of Mexico, as one of the largest conurbations in the world, encompasses a large number of universities. Efforts in recent years to widen access to university education have in part been hampered by the difficulty many students from less well-off backgrounds have in paying fees, coupled with political unpopularity of simply increasing subsidies to students. At the same time, marginal neighbourhoods are in need of sustained programmes of social support to combat poverty and its consequences. In an imaginative programme on a very large scale, which at once helps these neighbourhoods and helps less well-off students to afford their studies, the recently-launched *Prepa-Sí* programme¹⁸, with an annual budget of some US\$100M, provides partial bursaries to some 250,000 students in exchange for two hours per week of voluntary work in districts with social needs. The specific activities undertaken include: literacy campaigns; informal courses; organizing recreational and cultural activities, such as sporting events and museum visits; and environmental and public health improvement programmes.

University of Colima, Mexico – Student Volunteer Programme

The Student Volunteer Programme began in September 2006 with the dual purpose of promoting volunteering among university students and supporting the projects of civil society organisations, federal, state and municipal governments, NGOs and other institutions that encourage social development and a culture of cooperation and participation. The programme has a number of objectives¹⁹:

- To contribute to the fulfilment of the Millennium Development Goals.
- To raise awareness within the university community and civil society organisations of the new culture of social cooperation and participation.
- To fight poverty and social marginalisation by means of volunteer work.
- To help student volunteers gain a well-rounded education by applying their theoretical knowledge for the practical benefit of society.

5.3.5. Promoting public dialogue around university knowledges

Universities have become more actively involved in promoting the understanding of the ideas and knowledge that are held within universities in ways which are accessible to the general public. This takes place through a range of media such as television, radio and

¹⁸ www.prepasi.df.gob.mx/info/ (last accessed 11-2-2009)

¹⁹ <http://www.guni-rmies.net/observatory/bp.php?id=93>

through newspaper articles. Public engagement projects also focus on websites, school visits etc. Universities also aim to stimulate public discussion of the societal issues arising from some forms of research, and in its most effective form, to respond to and be led by interests and inputs from societal stakeholders.

Open University – Open2net

The Open University and BBC have been in partnership for over 30 years providing educational programming to a wide audience. In recent years this partnership has evolved from using late night television slots for delivering courses to peak time programmes with a broad appeal to encourage wider participation in learning. These programmes are often delivered by academics across a wide spectrum of disciplines from within and outside the OU.

For example Dr Iain Stewart Senior Lecturer at the Department of Geology at the University of Plymouth (former Honorary Research Fellow in the Centre for Geosciences at Glasgow University) has researched in the broad area of Earth hazards and natural disasters he has been host of a number of popular science programmes such as Earthquake Storms and currently Journeys from the Centre of the Earth. This programme is a joint Open University and BBC co-production and explains how geology has influenced the history and the make-up of the Mediterranean.

Brian Cox is a particle physicist and professor at the University of Manchester. He is also known for his involvement in science programmes for BBC radio and television, the BBC Horizon (a popular science and philosophy documentary programme) series (“Large Hadron Collider and the Big Bang”, “What On Earth Is Wrong With Gravity” and “Do You Know What Time It Is?”) and for voiceovers on the BBC’s Bitesize revision programmes. He also gives public understanding of science talks at schools, science festivals and conferences. In 2006, Brian received the British Association Lord Kelvin award for his work in promoting science to the public.

Coast is the BAFTA award-winning television series produced by The Open University and the BBC which investigates the UK’s constantly changing coastline and features stories about people, wildlife and communities. The Coast team of presenters include Alice Roberts a qualified medical doctor who teaches anatomy at the University of Bristol, Mark Horton, Head Archaeology and Anthropology at the University of Bristol.

Professor Marcus du Sautoy, Professor of Mathematics at the University of Oxford, has been appointed to the Charles Simonyi Chair for the Public Understanding of Science (of which Professor Richard Dawkins was the first incumbent until his retirement in September 2008). Professor du Sautoy has sought to popularise maths through a number of media – television through series such as the Story of Maths on BBC4, radio and through newspaper articles. Professor du Sautoy also holds an EPSRC Media Fellowship - these fellowships are open to researchers with a strong background in research and abilities in communicating science to the general public. At present there are seven EPSRC Media fellows in chemistry, music, engineering, physics.

5.4. Services delivered for external stakeholder benefit

These are where the university's assets are used to deliver services which benefit a community.

5.4.1. Opening university infrastructure to the community

Universities also support community engagement by making campus facilities and activities available to groups often at a concessionary rate. Universities also manage sports facilities, cultural events and conferences and work with external partners including local schools and colleges to open up these spaces for local use.

North Carolina Central University - Closing The Gaps Community Engagement Community Initiative

Innovative use of technology on the campus and in the community to keep the campus and community connected and to increase the technology skills of both students and community members - innovative uses of technology to support the service-learning programme for example through the Saturday Academy. The Saturday Academy programme is offered to students in grades 3-8 who are not performing well. For 13 consecutive Saturdays, the Academy provides supplementary educational assistance to elementary and middle school students. The program takes a holistic approach to addressing needs of at-risk students. Prospective Saturday Academy Students are identified by low test scores in reading and mathematics. Parental involvement is also considered to be crucial and with this in mind parents are required to attend at minimum of five classes designed to address the following issues: literacy skills, the impact of media on children, ABC, accountability standards, educational development. - <http://ariel.acc.nccu.edu/divisionofExtendedStudies/ctg/index.html>

Open University of Catalonia – Virtual space for NGOs

In Catalonia there are a large number of NGOs that carry out cooperation and solidarity work. These organizations usually have some difficulties in communicating with their members and collaborators because of the distances that separate them. In some cases there are also difficulties in handling the new technologies and few opportunities for training due to limited time and resources. The Open University of Catalonia has experience in the field of communication and virtual education and it was through this that the UOC's solidarity area was set up in 2001. The NGO Campus project is a digital space that allows NGOs and civil society associations to organise communication and training activities. <http://www.guni-rmies.net/observatory/bp.php?id=40>

5.4.2. Bringing the community onto campus

A very common way of increasing community engagement is by integrating the university public spaces into the public realm, and reducing the barriers which communities can face to accessing those spaces. Part of this involves managing the interface between university and city, either at the edge of the campus, or in an integrated urban site around buildings owned by the university. Universities have many facilities which may be of wider value, and events organised in those spaces need not play upon the university association, such as the use of university parks for healthy living clubs.

Likewise, university sporting teams involved in local leagues will necessarily bring local sport users onto the university estate, which can offer a more or less welcoming reception to those users.

Robert Gordon University has collaborated with Grampian police to provide a mobile football surface and coaching for young people in areas where sporting facilities are not available. Tied into policy initiatives aimed at preventing youth crime the 'Street Football project' takes place in the evenings across a number of disadvantaged areas in Aberdeen. Latest figures show that around 2,000 young people (5-18 years) participated in the project in 2007. Private and public sector interest and investment has helped to sustain the project.

The on-campus sports centre at Heriot-Watt has long been open to the public but in 2004 entered into a unique partnership with the local football club, Heart of Midlothian, to establish the Hearts Football Academy. The aim of the Academy is to identify local talent within schools and provide a package of both education and training on-site. It will become the location for all of Hearts youth development as well as open its 'state-of-the-art' facilities to the public. Students at Heriot-Watt will likewise have access to the Academy's facilities, including those attending its sports scholarship programme. The Academy aims to both inspire local youth, from as young as age 6, and build Scotland's future football capacity.

5.4.3. Universities as 'experts' for societal weal

This function is one of arguably the most common forms of engagement between universities and their host societies. Indeed, distinguishing between universities and societies neglects the fact that staff and students are members of that society, and may occupy positions which offer the opportunity to become activists and experts in particular areas. In Thessaloniki, in Greece, an economics professor, Nicos Comninos, was responsible for effectively managing the drawing up of a regional innovation strategy that laid the foundation for the peripheral northerly region to become designated as the Innovation Pole of Greece. Arguably, the more remarkable examples of practice are those that which encourage individuals to undertake that activity as part of their core employment task, supplementing their core teaching and research activities.

Rewarding staff systematically for engagement: the University of the Sunshine Coast

The University of the Sunshine Coast (USC) is a small campus based university to the north of Brisbane in the state of Queensland.

"The University's mission is to be the major catalyst for the sustainable advancement of the region. Our philosophy is: of the region, for the region, with the region. Our approach is to use the full resources of the University to catalyse regional development."
<http://www.usc.edu.au/Community/RegionalEngagement/Philosophy/Philosophy.htm>

Part of this mission has been realised through changes to the promotion policy within the university, and formally recognising the importance of engagement through the promotion policy. This policy has two important elements, firstly making engagement something that all staff are expected to do in some measure, and secondly, creating

promotion pathways for those that excel in engagement. OECD (2007) cite this policy as an example of best practice, and some of the key elements within the policy are reproduced in the box below.

Box A: Excerpts from the University of Sunshine Coast promotion policy

Promotion is awarded on merit. The criteria defining merit relate to:

- academic Qualifications in accordance with the T and R Staff Member Position Classification Guidelines (PCGs), and
- sustained academic achievement in teaching, research and engagement...

8.3 Engagement

Engagement at the University of the Sunshine Coast includes regional, national and international engagement and engagement within the University.

The University's Mission statement provides a framework for the University's commitment to regional, national and international engagement. The Regional Engagement Plan 2007-2009 articulates the importance of partnerships and ongoing consultation and cooperation with regional stakeholders, which also extends to other regions, including internationally, where there are common issues and concerns.

Engagement, which involves using specialist knowledge for the benefit of the community, is a scholarly practice through which T and R staff apply their academic knowledge and skills to consequential problems in the world beyond the University. It can be both in a remunerated capacity as consultancy, or without remuneration. Engagement provides a base from which new teaching and research outputs can be generated. Through engagement, worthwhile social, civic and professional functions are performed.

Engagement within the University is a scholarly practice that has the purpose of helping the University to define and achieve its goals and enable it to be a healthy organisation.

Engagement may include:

- developing and maintaining strategic and productive partnerships, connections and relationships with people, groups and organisations at local, national and international levels
- contributing to pre-University education in the region through interactions with schools
- editing journals and being a member of review panels
- creating opportunities for discussion of intellectual, social, economic and cultural issues of importance to the wellbeing of the community
- making professional commentary on issues in the general media and within the wider community which involves bringing specialist expertise to bear on issues of general public interest in a range of fora
- undertaking major consulting projects through the University

- making contributions to significant projects that advance the achievement of the University's Mission
- taking on roles of responsibility within the University, such as key coordination roles...

Level D (Associate Professor)...

As a leader in engagement, an Associate Professor has substantial involvement in University and/or regional development. They are able to demonstrate sustained performance that has led to significant outcomes, which can be established through standard academic outputs such as publications and grants and/or through recognition from the community and/or the University...

Level E (Professor)...

As a leader in engagement, a Professor has significant involvement in University and/or regional development. They are able to demonstrate sustained performance that has led to major outcomes for the University which result in high levels of recognition (for example, through publications and ARC linkage grants) and significant social, economic and cultural impact that benefit the region and/or beyond. <http://www.usc.edu.au/University/AbouttheUniversity/Governance/Policies/HR/TandR.htm>

University of Wisconsin- Madison: healing a fracture land use reform coalition

The University of Wisconsin-Madison (UWM) is an institution which is and has been strongly committed to university engagement. Wiewel and Knapp (2005) cite the activities of UWM in encouraging land use reform in Wisconsin as an example of best practise in expert involvement (*cf.* Ohm, 2005). The Wisconsin Idea was that as an institution supported by state funds, the university should create benefits for the citizens of Wisconsin as well as the wider human community. The early tangible signs of this came in the 1880s, as UWM established its agricultural extension programme, but since then, the university has established and justified itself with the notion that it owes a duty to the state in return for their financial support (Ohm 2005).

From the late 1980s, one of the main economic development issues for the state was the fragmented and overlapping nature of sub-regional governance structures, counties, and the local structures, towns, cities and villages. A land use council formed to explore the issue published a report, *Planning Wisconsin*, which achieved very little. Wisconsin Realtors Association approached University of Wisconsin Extension. Together, they built up an activity programme which both earned a state commitment to provide congressional time for proposals, as well as tying into the American Planning Association research programme around smart growth. This worked forward, produced an effective reform, as well as providing the Extension project manager with new research material which was subsequently published.

5.4.4. Contributing to the civic life of the region

It is acknowledged that universities tend to have a cultural effect on their host community because of the integration of their staff and students into the communities where they

live. Maassen & Van der Velde (2003) map the membership of university staff at the Radboud University, Nijmegen, in local clubs, societies, foundations and authorities and find that university staff in such situations do have a significant effect in supporting the cultural and social capital of these regions. Likewise, students can play an important role, and GUNI (2008) highlight the role played by civic service as a component of degrees in supporting wider civic life. Cortez Ruiz, for example, notes that community service for graduates is compulsory in almost all Latin American countries, particularly for those undertaking medicine and allied degrees.

- **Costa Rica:** a compulsory programme called University/ Community Work (TCU)
- **Cuba:** public service is part of university extension activities, used to carry out projects linked to community development
- **Mexico:** service is obligatory for all HEI graduates,
- **Nicaragua:** service is obligatory for all graduates, although only health science graduates must participate to graduate
- **Dominican Republic:** compulsory programmes for students
- **Uruguay:** compulsory service in medicine, law, agronomy, architecture and dentistry
- **Venezuela:** medicine, dentistry and nursing graduates complete a year of service,
- **Bolivia, Ecuador, Electric Salvador, Guatemala, Honduras, Panama, Paraguay & Peru:** only compulsory for medicine students

(Cortez Ruiz, 2008, p.156).

The Somerville Collection, Charles Sturt University and local partners in Bathurst, New South Wales Australia

Charles Sturt University played the role of project manager and animator to bring together a partnership to retain and display a world class collection of minerals and fossils as a tourist facility and educational resource in the market town of Bathurst. Warren Somerville is a farmer on the plains of New South Wales with a passion for geology and who had amassed a nationally significant collection (estimated at \$15 million in value, including crystals from over 100 Australian mine sites, the world's largest rhodonite gem crystals, 2,000 million years old garnets, rainbow-coloured fluorites from China, and the only complete T Rex skeleton in Australia) which he wanted to have kept in the locality and displayed for the general public. The University recognised the importance of the collection and brought together a consortium including the city council, state government, and the Australian Museum from Sydney to create a museum to house the collection in Bathurst. The building was an old school which was donated by the State Government after a direct appeal from the University to the premier. \$4 million was raised to create the museum. Warren Somerville was appointed as curator of the museum to continue to work with the collection as part of the deal in which the collection was transferred to the ownership of the Australian Museum but on condition that it is kept together in Bathurst. The University also used its students to assist in the design of the exhibitions and marketing of the facility.

5.4.5. Universities and large community development projects

The Antigonish Movement

The Antigonish Movement is a striking example of a socio-economic development initiative founded by a higher education engagement programme, which successfully empowered poor communities in the industrial areas of eastern Nova Scotia in the mid 20th Century. As eastern Nova Scotia has a history which closely parallels that of North East England: it is a maritime region, similarly geographically distant from provincial and national capital cities, and had many of the same industries as, most notably fishing, coal mining and steel production. The depression of the 1920s caused severe hardship in both regions, but in the case of eastern Nova Scotia a remarkable process of ‘self-help’ was launched in that period which flowered over the following decades into the Antigonish Movement.

It is important to understand that the population of eastern Nova Scotia is predominantly Roman Catholic: the local indigenous people, the Miq’maq, were converted to Catholicism by French missionaries in the 18th Century. Subsequently, Acadian settlements were established, with their very strong Catholic traditions. In the 19th Century the Highland Clearances of Scotland resulted in wholesale expulsion of Gaelic-speaking Roman Catholic communities from the western Highlands and Islands, and many of these people settled in Cape Breton Island (where Gaelic is still spoken, though endangered). Subsequent influxes of immigrants from Ireland and Poland further bolstered the Catholic predominance.

It is no surprise then, that the first higher education institution in eastern Nova Scotia was founded by the Catholic Church: St Francis Xavier University (widely referred to as “St. FX”), in the town of Antigonish on the Nova Scotia mainland. The Church hierarchy originally viewed St. FX principally as a junior seminary that also offered opportunities for education in classical liberal arts and allied professions (education, law etc) to lay people. Most of the academic staff were Catholic priests. Given that many of these priests hailed from working-class communities on Cape Breton Island, they were aware of the socio-economic problems of the region. In the wake of the First World War, Fr Jimmy Tompkins, who was then Vice-Rector of St. FX, began to criticise his institution for its studied neglect of the conditions of impoverished communities in the region, and to advocate a re-design of curricula and modes of delivery to achieve what he termed “educative democracy”, in which the focus on rather aloof liberal arts formation would be reduced in favour of technical subjects which would equip the regional population with the knowledge and skills needed to lift their communities out of poverty (Lotz & Welton 1997). He particularly advocated a major expansion in adult education, to be delivered in the industrial towns (which were and are mainly located on Cape Breton Island). Fr Tompkins’ criticisms gradually grew in both stridency and public impact, particularly following his private publication in 1921 of 5,000 copies of a booklet entitled *Knowledge for the People: A Call to St Francis Xavier College*. This manifesto explicitly cited the adult education achievements of the Gaelic League in Ireland and the Workers’ Educational Association in Britain. Although the booklet was greatly appreciated within and beyond Nova Scotia, it was considered one step too far by the Bishop of Antigonish Diocese; in 1922, Fr Tompkins was stripped of his university position and banished to serve as parish priest to a then-remote fishing community called Canso (today, a causeway joins Cape Breton Island to the mainland at this point).

Although initially deflated, Fr Tompkins soon recovered his poise and decided to put into practice himself the principles of adult education he'd been advocating. During the first four years of the twelve he spent in Canso, the Great Depression ravaged existing, absentee-owned fishing-related infrastructure. Realising that prospects for a return of inward investment in the foreseeable future were slim, Fr Jimmy embarked on a collaborative education process with the local population which eventually resulted in the establishment of an inter-linked system of credit unions and cooperatives. Lobbying of the Provincial and National government departments also resulted in regulation of incoming fishing boats which damaged the local ecology and thus the resources available to locally-resident inshore fishermen. After moving to the impoverished coal mining community of Reserve Mines in 1934, Fr Tompkins again worked with local residents to develop decent, affordable housing where slum conditions had previously been the norm (Lotz & Welton 1997).

What Fr Tompkins had failed to achieve by argument alone he had now articulated even more compellingly by example. Inspired by his efforts, St. FX finally established an Extension Department in 1928, headed by another priest, Fr Moses Coady (who happened to be a cousin of Fr Tompkins). It was the sustained activities of this Department, and of many other engagement projects later launched out of other departments in St. FX, that came to be known as the Antigonish Movement. The Canadian Encyclopedia summarises the *modus operandi* of the Antigonish Movement as follows²⁰:

“... Typically, one of the movement’s organizers would enter a community, use whatever contacts could be found and call a public meeting to assess the community’s strengths and difficulties. A study club would be created and a program for a series of meetings developed. Usually, at the end of these meetings, one or more co-operatives would be established to help overcome the difficulties that had been discussed. The credit union was most common, but the movement also organized co-operatives for selling fish, retailing consumer goods, building homes and marketing agricultural produce ...”.

This model of community economic development catalysed by interactions with the university drew wide attention. Besides being widely replicated throughout the Maritime Provinces of Canada, and in nearby parts of the United States, the work of the Antigonish Movement spread overseas (primarily through the Catholic Church network) to the undeveloped countries of the Global South. To this day, community development workers from these countries still come to St. FX to study the principles and practice of their profession in the Coady International Institute (originally established in 1959).

Although needs and appropriate means have changed considerably since the mid-20th Century, the benefits of the Antigonish Movement continue to be felt in the region. The raising of aspirations in the coal and steel towns in the Sydney area of Cape Breton Island led to an increased demand for Higher Education, and a university institute was founded there in 1951, initially as a daughter college of St. FX. In 1982 this Institute gained independence from St. FX (Morgan 2004) and was renamed Cape Breton University

²⁰ www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=A1ARTA0000242

(CBU) in 2005. This university already has a substantial reputation for pioneering community-based economic and cultural development, not least through the efforts of another priest, Fr Greg MacLeod (presently Emeritus Professor of Philosophy), who established the Tompkins Institute for Human Values and Technology²¹ at what is now CBU in 1974 (Morgan 2004), followed shortly thereafter by a community development corporation, New Dawn Enterprises Ltd²², which has been developed using not only local experiences, but drawing heavily on the success of the Mondragón Cooperative Corporation in the Basque Country (see section 4.3.4, and also MacLeod 1997).

The Kelvin Grove Urban Village – Queensland, Australia

The Kelvin Grove Urban Village involves Queensland University of Technology and the Queensland Government, through its Department of Housing working in partnership to revitalise 16 hectares of land at Kelvin Grove, just two kilometres from Brisbane's Central Business District. It is the first inner-city development of its kind in Australia, where a government and university have come together to plan and build a new integrated community. <http://www.kgurbanvillage.com.au/>

Isla Venado, Costa Rica

The National University of Costa Rica is a relatively young institution, founded in 1974, which from the first has had a strong commitment – at least in principle, and often in practice – to engagement with communities throughout this small Central American country. In 1983, Rose Marie Ruiz Bravo was appointed *Vicerrectora de Extensión* (i.e. PVC for Engagement), the first woman to occupy this position in a Costa Rican university. In the following three years, she set much of the tone for what has since developed into an extremely broad engagement programme, ranging from support programmes for SMEs to radical programmes of community socio-economic development with marginalised communities in rural and coastal regions of the country. Ruiz Bravo went on to serve two terms as *Rectora* (Vice-Chancellor) in the 1990s, before moving on to reorganise a governmental social aid programme at national level. A model of university-society 'levels of communication' developed by Ruiz Bravo (1992) is discussed in Section 6.2.1 below. Here, a brief description is offered of one of the longest-standing and most successful community development projects led by Ruiz Bravo; full details may be found in the book by Ruiz Bravo *et al.* (2008).

Isla Venado is a small island in the Gulf of Nicoya, a major embayment on the Pacific coast of Costa Rica. After the indigenous population was sold into slavery by Spanish conquistadors, beginning in 1527, Isla Venado and its neighbouring islands ended up depopulated. Apart from seasonal fishermen's camps, the islands remained uninhabited until 1911, when poor families in the region re-settled the islands in the search of sufficient land to produce subsistence crops to supplement the catches of their fishing boats. However, because the settlement was informal, without grant of tenure by the national government, the status of the landholdings on Isla Venado has remained in dispute, the most serious consequence of which is reluctance on the part of public

²¹ <http://faculty.uccb.ns.ca/tompkins/>

²² <http://www.newdawn.ca/index1.html>

authorities to provide the infrastructure common in similar communities on the mainland. As Costa Rica has expanded its image as an ‘eco-tourism’ in recent decades, so a (generally unstated) policy of discouraging poor people from settling in areas deemed to have tourism potential has intensified. Thus the population of Isla Venado (which now numbers a little under 1000) has repeatedly been excluded from regional development strategies of a country which is, paradoxically, one of the most liberal and enlightened in Latin America.

It was to this situation that Ruiz Bravo and her multi-disciplinary team from the National University turned their attention in the year 2000. Implementing an approach to engagement which they termed “participatory social accompaniment” (PSA), Ruiz Bravo *et al.* (2008) assisted the communities on Isla Venado to address their own socio-economic problems. Team members from a wide range of disciplinary backgrounds (sociology, engineering, law, environmental sciences, education) visited the island regularly, staying for up to two weeks per visit. The PSA model is not to simply propose solutions to practical problems (e.g. lack of medical provision; lack of schools; lack of fresh water and sanitation; lack of electricity; lack of fresh vegetables etc), but to encourage residents to believe that they themselves can organise to articulate their needs and find ways of addressing them. The specialists from the university are then on hand as ‘sounding boards’ to help the community to decide between alternative approaches to solving specific problems. Little by little, most of the problems which beset the island have been addressed. In many cases this has been by self-help construction and educational projects, ensuring that local sources of expertise are shared amongst residents. In other cases (e.g. electricity, water, medical provision), the university partners have been able to use their knowledge of life in the cities where government agencies are located to arrange for the community from the Isla Venado to successfully make the case for extension of federal government services to the island. Some 44 governmental agencies have been drawn into the PSA development project on the island in this manner. At present, attention is turning to legal issues, to ensure secure landholding tenure for the residents of the island. All of this has been done with a clear eye on developing precedents which can in future be used to help other communities in insular and coastal zones of Costa Rica to assert their rights to livelihoods in the face of growing pressure from tourist developments (Silvia Rojas, *personal communication* 2008).

5.5. Involving external partners in teaching activities.

This is where organisations are involved in some way in teaching activities in ways that ensures that the educational experience helps to improve the situation faced by the group involved. This change may be a short-term one, by educating people in firms and communities directly, or may be a longer one, by creating professionals with the skills to work better with smaller firms and third sector organisations, or by contributing to a culture celebrating lifelong learning. This may include activities such as:-

5.5.1. Meeting the needs of ‘hard-to-reach’ groups

In some cases students are directly exposed to the needs of hard-to-reach group through the course of their studies. In the cases outlined below learning is directed towards the

needs of medical care in rural communities and educational initiatives through curriculum transformation aimed at addressing the needs of particular hard-to-reach groups.

University of Northern British Columbia - The Northern Medical Programme: bridging medical education and the community

The Northern Medical Program (NMP) is a partnership between University of British Columbia (UBC) and the University of Northern British Columbia (UNBC). The programme is part of the government's 10-part Rural and Northern Health initiative to improve health care for patients and was set up in response to the concerns of 7,000 Northern BC residents and physicians in 2000 about the state of health care in the North and the shortage of physicians and healthcare professionals. Four years later, the Northern Medical Program welcomed its first students and in May 2008, twenty-three medical students graduated from the programme. The goal of the Program is to train physicians in the north for rural and northern practice. Through this programme, the University hopes to create health care professionals who will stay and work in BC's northern and rural regions where access to proper medical care is often lacking. In addition to providing overall medical education, the northern medical program addresses special issues for northern communities, including aboriginal health. The course provides classroom and early clinical exposure to rural healthcare delivery, during the 3rd and 4th years students have the opportunity to spend a significant period of time in hospital and community settings throughout Northern BC working with a physician in a rural or remote community. This program has much support in Northern BC with over 20 communities having partnered with UNBC to ensure it succeeds. NMP became the focal point for co-operation, broadened networks and the co-operation improved levels of trust.

At a recent presentation at the Knowledge in Motion Conference 2008 Regional Medical Schools in Canada: Northern Medical Program, Geoff Payne, University of Northern British Columbia suggested that the strengths of the Northern Medical Program were teaching opportunities; research opportunities; recruitment and retention of physicians and the challenges were sustainability; continued engagement of stakeholders; expansion. A number of benefits were identified in another presentation by Patricia Toomey, University of Ottawa. At the local level there was an increased interest in medicine and increased opportunity to pursue medicine, in the health services sector there is increased access to specialists and more physicians in the north, it is also hoped that the programme will have a beneficial impact on the economy in terms of attracting businesses and professionals and also in helping to foster changes in attitudes and perceptions about opportunities/abilities. Again she thought there was a need to foster and maintain community support; develop comprehensive communication strategy which builds on and communicates positive impacts whilst educating community regarding realistic expectations. Future directions might take the development of community-university research partnership as a way of further integrating community groups and university (The Northern Medical Program: Bridging Medical Education and the "Community" Trish Toomey, M.Sc.)

The NMP Community Partnership programme is a partnership between the Northern Medical Programs Trust, UBC/UNBC medical students, the Northern Medical Program and participating communities in Northern BC. In this the community is encouraged to

provide a ‘homestay’ for the student while they are visiting the community, an opportunity to have meals with physicians and non-medical members of the community, a medical experience and then the opportunity to see and experience the community and the activities that it provides to its population. Also in the development of a community overview package (what does your community have to offer?) to be provided to UBC medical students. The student will be asked to visit the community on an annual basis so that they can observe first hand the northern medical component, the change that small rural cities can experience on a yearly basis, and the vast number of activities that many of these communities have to offer. <http://www.unbc.ca/nmp/welcome.html>

The Massachusetts Coalition Experience - developing culturally responsive teachers through community based collaboration.

The Massachusetts Coalition developed a wide range of innovative practices that placed future teachers in school and community-settings to explore the interaction of theory and practice. The Coalition comprised seven colleges and universities (Boston College, Clark University, the University of Massachusetts at Boston, the University of Massachusetts at Amherst, Lesley University, Northeastern University, and Wheelock College), eighteen urban schools in the cities of Boston, Springfield, and Worcester, and a dozen community-based organizations. Funded by a \$7.2 million United States Department of Education grant, the Coalition enabled struggling urban schools, community-based organizations, and colleges and universities to overcome traditional boundaries and turf issues to develop conjoint strategies for improving schools and the quality of teachers who work within them. <http://www.guni-rmies.net/observatory/bp.php?id=17>

Higher Education Institutions in South Africa – achieving sustainable development through curriculum transformation in HEIs of southern Africa.

The Course Development Network, composed of universities, NGOs, polytechnics and other organizations responsible for developing environmental education programmes. This was the first formal network to be set up, in 2001, and aims to broaden and strengthen environmental education capacity and professional development in the region. Out of the 13 institutions that make up the network, six are universities: University of Botswana , University of Malawi, University of South Africa , University of Swaziland , Rhodes University in South Africa and the National University of Lesotho. This formal network is linked to a more informal network consisting of over 28 course development initiatives. In the course development process, the networking institutions meet at course development workshops twice a year over a period of thirty months. Through these regional workshops, network members share skills, experiences and resources in order to enable the development of environmental education courses in their own institutions, drawing on their local context. The network has been compiling a course developer’s resource kit called ‘the toolkit ‘ . This is a collection of course development materials and case stories from members and partner institutions. The toolkit is seen as a resource that will enable the developing work of the network to unfold as a coherent capacity development programme. One of the most notable achievements of the network has been the development and implementation of at least 12 new courses in environmental and sustainability education. <http://www.guni-rmies.net/observatory/bp.php?id=111>

5.5.2. Educating students in community citizenship.

Students may also be encouraged to be better community citizens by devising a curriculum that includes social responsibility as a basic added objective. In the 1990s, there was much work which focused on inculcating the principles and thinking around sustainable development – and particularly in communities taking responsibility and reflecting on their own circumstances – developed in university education. Increasing social inequality in the last decade has emphasised the importance of reflecting on societal solidarity, and considering the role of education in emancipation and fulfilling societal citizenship.

University of Concepción, Chile – Training professionals in socially responsible values, attitudes and behaviour.

This project began in 2003. Eleven Chilean universities are involved in the project, which aims to reflect on the role of higher education institutions in the country.

Specific objectives:

1. To attain verifiable changes in the values, attitudes and behaviour required to act with social responsibility (SR) in students of the degree courses involved in the programme.
2. To have a team of academics who are qualified to train teaching staff and students in social responsibility.
3. To have a permanent support unit for disseminating, teaching, learning and acting with social responsibility, which is linked by a network to the associated universities.
4. To establish a common programme in the associated universities for permanently teaching social responsibility. <http://www.guni-rmies.net/observatory/bp.php?id=73>

5.1.1 Supporting a public ‘marketplaces of ideas’ for its citizenry

Universities have a history of encouraging the dissemination and exchange of ideas through their public lecture series which are free and open to the public as well as to students and staff.

The Harris Centre, Memorial University Canada – Public Policy Forums

The Harris Centre co-ordinates and facilitate the University’s activities relating to regional policy and development. The Centre has a number of priority themes and projects related to teaching, research and outreach which aims to generate greater interaction of Memorial University faculty, students and staff with stakeholder needs and opportunities. One such interaction involves organising opportunities for interaction, stimulating opportunities for debate and discussion on issues of public importance in regional policy and development. The Harris Centre offers two different types of public policy forums. The John Kenneth Galbraith Lectureship in Public Policy is an opportunity for Memorial University to invite a nationally or internationally renowned speaker to discuss an issue of current interest. The lecturer normally spends up to five working days at the university and the lectureship is divided into three components:

- A public lecture, held on a weekday evening with free admission. A reception is held afterwards where the audience can meet the lecturer.

- Formal and informal discussions with staff and students at the university. These are open to the public by invitation only.
- Formal and informal discussions with public servants and community representatives on public policy issues.

Regional Workshops are held four times each year at various locations across Newfoundland and Labrador, these are designed to foster communication, and possible collaboration, between Memorial researchers and the wider Newfoundland community. Each workshop lasts a day - the morning session is dedicated to informing local stakeholders about the activities which Memorial University is conducting in the region on teaching, research and outreach and the afternoon session dedicated to identifying other ways in which the University can assist the region – a new opportunity brainstorming. Registration is free for all participants, and lunch and refreshments are provided by the Harris Centre. The workshop is preceded the evening before by a ‘Memorial Presents’ lecture on a topic of public interest.

A number of key lessons have been learnt from this process: these sorts of activities go down very well with staff and students but you also need senior administration buy in; that communicating to the public is not always easy, the community is grateful for the effort but it is important to follow up with a working meeting to identify priorities for new opportunities (keep a tracking sheet); need champions from the university but must be able to present well and address issues of public, media relations take work, know-how and dedicated resources, use evaluations, put results on web site; communicate success.

5.5.3. Provision of training & continuing professional development

Increasingly Universities are involved in delivering specialist courses that meet professional and vocational requirements within the voluntary and community sectors. These programmes can be aimed at enabling managers to become more effective leaders, to learn to develop strategic approaches within their organisation, to help to orientate their provision towards the needs of hard-to reach groups.

Catholic University of Córdoba – Programme of civil society support

COMPAS training programmes for leaders and directors of organizations are designed to enable them to capitalize on organizational know-how by identifying and disseminating successful experiences. The aim is to increase civil society associations’ capacity to impact on government policy. COMPAS aims to support the growth of civil society associations on two fronts: by improving their internal management, and by establishing and consolidating a leading role for them in civil society. To achieve these goals, it develops projects involving education, research and guided technical assistance. The ‘specialization in management of non-profit-making organizations’ started in 2000 as part of a range of postgraduate courses offered by the Institute of Management Sciences at the Catholic University of Córdoba. The project for individual consultations within organizations began in March 2001. This consists of a team of consultants who offer their services to civil society institutions. As their fees are paid from COMPAS funds, there is no charge to the civil society organizations. <http://www.guni-rmies.net/observatory/bp.php?id=49>

University of Zimbabwe – Leadership Regional Network (LeaRN)

The objective of the Leadership Regional Network (LeaRN) was to contribute to the development of leadership abilities at local, regional, national, regional and international levels. With a view to increasing communities' decision-making capacities in all decision making processes. <http://www.guni-rmies.net/observatory/bp.php?id=75>

LeaRN aimed:

- To strengthen young people's leadership abilities;
- To develop the abilities of traditional leaders, civil society organisations, and the public administration through formal and informal educational opportunities.
- To encourage critical reflection on the challenges facing all levels of society today.

Research was undertaken by the University of Zimbabwe which addressed topics affecting: leadership; the development of rural areas; and rural areas' participation in the country. Alongside this, seminars were undertaken with local leaders. These seminars provided training so that leaders could define development strategies for their communities and participate in public decision-making processes in the country. Other activities included a programme to raise the social awareness of regional leaders, particularly in matters of gender and age inequalities.

Funding for LeaRN Zimbabwe (3.5 million dollars per year) were provided by the University of Zimbabwe and the Kellogg Foundation (<http://www.wkcf.org/default.aspx?LanguageID=1>). Other organisations partially funded the project. One of these was the foundation IN KIND (<http://www.kindfoundation.org/>) which funded training for local leaders.

Coady International Institute - Training and Research for Community based development²³

The Coady International Institute is an independent unit of Saint Francis Xavier University, based in Antigonish, Nova Scotia. Founded in 1959, the Institute is dedicated to training the leaders of community organizations, NGOs, local governments and institutions to improve the living conditions of poor communities, especially in developing countries. It was a central element of the socio-economic development initiative in eastern Nova Scotia which came to be known as the Antigonish Movement (see Section 5.4.5). It receives funding from the Canadian federal government through the Canadian International Development Agency (CIDA), from public and private donors, and through its own activities (registration fees, projects and consulting services). The Institute has defined two major areas of activity: 1) training, and 2) research and cooperation tailored to each local context. The Coady International Institute has an enduring track-record of training many community development specialists from English- and French-speaking Africa and other developing countries.

²³ www.guni-rmies.net/observatory/bp.php?id=107

5.5.4. Supporting a regional lifelong learning culture.

Lifelong learning policy is driven by the belief that everyone should have equal and open access to high quality learning opportunities. It is closely linked with a wide range of policy goals concerned with both economic advancement and social objectives (tackling poverty, local renewal, community development, citizenship and social and cultural development). It acknowledges that learning is not just confined to the classroom but can be taught through many different means, often using new technology. Lifelong learning can be undertaken for many reasons including personal, civic, social or vocational purposes.

Department of Adult and Continuous Education (DACE) at Glasgow University

The Department of Adult and Continuous Education (DACE) at Glasgow University offers a range of community development courses in partnership with voluntary sector employers and practitioners. In 1993 a 1-year 'Certificate in Community Work' was formally accredited that acknowledged the skills integral to the work of community activists. Practical experience was a prerequisite to recruitment and valued as an entry qualification. From 2006 a dedicated BA in Community Development was established, which replaced the Certificate by a Diploma after 1 year of study within the BA. Although a 3-year course participants can access, leave and re-enter its study modules when appropriate for them.

An integral part of DACE's community development programme and team has been its 'Intermediate Labour Market' (ILM) projects. ILM projects have been funded by a mixture of Enterprise Agency, local authority, independent trusts and European Social Fund monies. They were aimed at those registered long-term unemployed who wanted to work in community development and delivered in partnership with community-based organisations acting as the 'host partner'. The host partner was responsible for recruitment and support of the students (approximately 10-12 in each programme). ILMs offered work experience for the duration of the course and for some employment at the successful completion of the course. Indeed a majority of participants entered into community jobs once qualified. DACE provided the relevant academic theory, which was then applied to the work of the relevant host partner, which, in turn, informed academic theory. ILMs covered a 3-year period; an initial 1-year Certificate of Higher Education and then access to years 2 and 3 of a formal degree. A number of host partners had agreed to support the student if choosing the degree route.

DACE also initiates research on the social impact and purpose of adult and community-based learning through the Centre for Research and Development in Adult and Lifelong Learning (CRADALL). In particular, the contribution of community and lifelong learning on such policy areas as social justice, social inclusion and poverty reduction. DACE also hosts a number of government-funded programmes, providing training, for example, to lay people sitting on children's panels concerned with Scotland's 'Children's Hearing System' and to professionals across Scotland working to address drugs and alcohol misuse.

DACE is an important link between the University and a wide range of external organisations involved in post-compulsory education and training. It was especially

noted that staff at DACE are not solely career academics but community development people ‘and that’s why it works’.

Centre for Work-Based Learning – Glasgow Caledonian University

The ‘Centre for Work-Based Learning at Glasgow Caledonian opens access to higher education through agreed ‘Learning Contract Frameworks’ that recognise both prior experience and learning and allocates credits for negotiated learning completed in the workplace. Its vocationally-based curriculum is integrated into the wider teaching reach of the University. The Centre also provides research, staff development courses and work-based learning consultancy services. It also jointly manages the ‘Trade Union Research Unit’ (TURU) with the Division of Business Economics and Enterprise. TURU aims to be ‘the centre of expertise and excellence in relation to Trade Union Learning in Scotland’. It thus designs and delivers learning programmes relevant to trade union learning representatives through its work-based learning frameworks.

Centre for Lifelong Learning (CLL) - Strathclyde University

The ‘Centre for Lifelong Learning’ (CLL) at Strathclyde University provides one of the most comprehensive programmes of continuous learning and professional development in the UK, with approximately 34,000 participants per annum. It offers courses in the three areas of ‘continuous professional development’, ‘adult learning’ and ‘senior studies’. The latter are co-ordinated through the ‘Senior Studies Institute’, a unique initiative in Scotland. This Institute has four main areas of work: ‘lifelong learning’; ‘useful learning’; ‘widening access; ‘initiating and supporting research’. The Institute also has a programme of ‘community partnerships’ through which it works with relevant organisational partners to deliver a range of educational opportunities to and with older citizens. In particular:

- Encourage Arts – delivered in partnership with Glasgow City Council offering arts activities with resonance for older people
- Sustainable Learning in the Community – a process of identifying ‘community champions’ and collaborating to profile skills and effectiveness as well as support learning development
- InCreaSe – Intercultural Creativity of Seniors – a travelling training academy for cultural learning seeking to engage with marginalised older people, for example, ‘the very elderly and ethnic minority groups’

Within the ‘widening access’ programme specific mention is made of engagement with social partners to help recruit learners from ‘less represented communities of place and interest’.

The Faculty of Education at Strathclyde is responsible for a range of vocational education and training covering undergraduate, postgraduate and workplace learning. It also hosts a number of Centres and Divisions related to its vocational reach (educational support, community education, counselling, guidance, speech and language therapy). The ‘Community Education Division’ specifically engages with professionals working in local communities, and, in line with a growing language and policy supported by the Scottish government, views community learning and development ‘as an approach to

social change, rather than only as a description of a narrow occupational service'.²⁴ Hence the work of the division helps the relevant professionals 'engage as active partners in shaping change'²⁵ to ultimately 'empower' communities.

This Division also hosts 'The Scottish Centre for Sustainable Community Development', which is currently inputting into the 'Conservation and Development in Sparsely Populated Areas' (CADISPA) project.²⁶ This is an applied research and community development project that 'is primarily concerned with developing a definition of sustainability which will be relevant to people living in sparsely populated areas and to the academic community, and Local Agenda 21'.²⁷ The research findings will be channelled through both community action and more formal academic routes. The project works with local communities through over 40 CADISPA project groups to identify local development needs and priorities and place any change 'within the "triangle of change", and takes into consideration environmental, economic and social issues'.²⁸ Academic staff provide advice and support on strategic issues and host an annual gathering of the CADISPA groups.

Through CADISPA the University is planning to deliver a 'Certificate Programme in Public Participation'.²⁹ This certificate is an internationally recognised skills development programme focusing on techniques for effective citizen engagement. It will be targeted at practitioners and consultants working in the fields of public involvement, community engagement, stakeholder representation, local government and the community sector. The course will be delivered by an international group of trainers licensed by the 'International Association for Public Participation' (IAP2).

5.5.5. Other examples of university engagement

Outwith the examples outlined above there are other interesting illustrations of universities undertaking interesting and innovative work in partnership with business and community groups.

Business / Higher Education Round Table - Australia

The Business/Higher Education Round Table is a forum where leaders of Australia's business, research, professional and academic communities can address important issues of common interest, to improve the interaction between Australian business and higher education institutions, and to guide the future directions of higher education.

<http://www.bhert.com/default.htm>

²⁴ <http://www.strath.ac.uk/Departments/CommunEdu/> (Accessed 16 October 2008)

²⁵ Ibid

²⁶ <http://www.strath.ac.uk/Departments/CADISPA/> (Accessed 16 October 2008)

²⁷ Ibid

²⁸ Ibid

²⁹ http://www.strath.ac.uk/Departments/CADISPA/docs/PublicPartCert_UK_Apr08_edited.pdf (Accessed 16 October 2008)

Dutch National Network for Sustainable Development in Higher Education Curricula (DHO)

DHO is an independent foundation, formed in 1958, funded by the government. DHO has a number of projects to integrate sustainable development into higher education which includes working abroad in partnership with organisations in Asia, Africa and Latin America; working with institutions and lecturers wishing to work towards the integration of sustainable development into the curriculum, alongside teaching the concepts of sustainable development. Most of the projects are coordinated from the Expertise Centre for Sustainable Development (ECDO) at the University of Amsterdam. One such project, which started in 2001, is the 'North-South, student projects on sustainable development in Asia, Africa, and Latin America'. In this project students participate in a multidisciplinary, intercultural research team in Africa, Asia or Latin America for a local organization on sustainable development. The research takes place in collaboration with a local university and a non-university organization. <http://www.guni-rmies.net/observatory/bp.php?id=65>

Community College, Social Service Experience. University of Bakhat Alruda, Sudan.

In October 2005 the university created the Faculty of Community Development, one of five faculties. The main mission of this faculty is to promote education and training for women in rural areas of the White Nile. In addition, the Faculty aims to train experts in local and community development and to conduct research on living conditions in rural areas of the White Nile. The Faculty of Community Development has set up eleven Community Colleges in rural areas of the White Nile. These colleges, which are jointly managed by the community and the University only admit and offer training to women from each community. <http://www.guni-rmies.net/observatory/bp.php?id=81>

6 MANAGING COMMUNITY ENGAGEMENT WITHIN A UNIVERSITY

6.1. Introduction

In Chapter 5, we have reviewed a wide selection of the kinds of engagement that are taking place between universities and external communities. Throughout this report, it has been clear that university engagement takes place in a context where there are a significant number of independent drivers which influence what can be achieved. These drivers can be classified into a number of areas:-

- Wider external pressures on governments and universities for HE system reform
- the national higher education system,
- national cultures and traditions of engagement,
- local demands place on universities as institutions,
- the capacity within existing institutions from activities already undertaken, and
- purposive decisions taken by university governance structures.

What it is impossible to do on the basis of an extensive literature review – which this report is – is to evaluate those practices in any detail and from them synthesis an intensive set of recommendations on those policies. Clearly, individual actions, instruments and interventions are far too dependent on the way those different drivers function in the particular context for good-practice examples to offer a ‘recipe’ for effective engagement that is generally applicable. Nevertheless, the purpose of this literature review is – as part of a wider set of activities – to inform the subsequent development of an engagement strategy for Newcastle University.

This demands that some kind of recommendations emerge from the literature review which can inform the development of the strategy. The most obvious recommendation is perhaps the least satisfying, and emerges immediately from the preceding paragraph. Any university seeking to improve the quality of its engagement needs to be mindful of the situation in which it finds itself, and to develop activities which fit with national structures, local demands and internal capacities.

One potential step beyond this might be to use the typology developed in 5.1, and map capacity/ potential for activity in each of those sub-fields, and identify where a university is not achieving its full potential. The basis of the strategy would then be then in trying to fill those gaps, by identify projects, policies and supporting measures which are necessary to encourage new learning and knowledge sharing communities around the university. The figure below suggests how this balanced score-card might appear in practise, with the first row hypothetically filled in:-

Table 5 A model balanced scorecard approach for university engagement activity

| Activity | Engagement | Opportunity | Performance | Strategic driver |
|----------|--------------------------------------|--|--|---|
| Research | Collaborative research projects (R1) | Co-designed, undertaken, analysed projects | Community involvement in steering groups | Better involving the community in research governance |
| ... | Research involving co-creation (R2) | Creating knowledge of mutual benefit | ... | ... |
| | ... | ... | ... | ... |

Where this approach is unsatisfactory lies in how the contents final column, the strategic drivers, are translated into a university strategy. One approach would be to use the contents of that final column to set the boundary conditions for what the university must achieve, and then attempt to devise a bottom-up strategy which incorporates all those elements. This might also potentially draw on the good practice examples in chapter 5 to suggest activities which the university might adopt.

But this falls some way short of Newcastle University’s ambition to deliver world-class engagement. In particular, it sells short the opportunity to develop bundles and clusters of real activities which deliver multiple kinds of engagement simultaneously, creating positive spill-overs via internal cross-subsidy. It is this bundle-construction process that we argue is vital to engagement, because without engagement being delivered through core university missions, it is destined to remain a peripheral activity. What chapter 5 demonstrates – to our mind persuasively – is that becoming engaged involves building engagement into the core activities of the university. What is not important is that the university ‘does R1’ on one occasion, but that all Research projects that the university is involved in do R1, but not just R1, but R2-4, and the various T, S and K activities in the typology.

This previous sentence is a shorthand way of saying that for a university that has serious aspirations to ‘be engaged’, every research project it has will seek to engage with one or more salient external communities, not just in the research design (R1) and prosecution (R2), but in providing teaching and learning opportunities that build dialogue with external communities, developing infrastructures which are open to external communities and helping to directly meet the needs of businesses, government bodies, charities, community groups and others able to benefit from that work. This inverts the idea of a balanced scorecard away from ensuring that a university does a little of all types of engagement, but to instead look at how the university places engagement at the heart of all its activities.

6.2. A progressive levels engagement model

University engagement is an extremely complex process, if it can indeed be thought of as a singular process. This necessitates caution when applying concepts of ‘quality’ and ‘world class’ to its management. It is easier to look at the quality of the management processes within a university than at that engagement itself, but because of the spectrum of university processes through which engagement takes place, that is equally fraught.

When looking at the quality of highly complex processes, one approach which can be adopted is to look at how effectively those processes are embedded within

relationships and networks with partners and stakeholders which provide knowledge about and certainty over the operational environment. This knowledge/ certainty in turn provides a positive environment for the most effective delivery of outcomes, with the highest degree of certainty. In business innovation, for example, although there is a quality standard process, ISO9001, what that standard does not capture is the extent to which innovation as a process is embedded in effective linkages with stakeholders in the new product development process, which underpin a wider innovation community of practise, which creates knowledge that the process then is able to incorporate.

6.2.1. Distinguishing modes of engagement in university communities

The issue of quality of university engagement then can be expressed as one of the extent to which the management of engagement is embedded with university relationships' with their communities. These relationships in turn define networks, and the way those networks operate can in turn define learning communities around the university. It is possible to normatively classify those networks in terms of the foundations they provide for engagement, on the basis of the scope and effectiveness of the relationships, and the size and topology of those networks, and the effectiveness of those learning communities.

In corporations, for example, management of business processes can be (arbitrarily) classified into four quality levels ranging from the least effective to what is currently 'world class' performance. At the lowest level, there may be no conscious management of the process, merely an awareness that the job is done. At the highest level, those in the company responsible for the process may have constructed a community stretching beyond the firm into suppliers, customers, distributors, collaborators and contacts, where knowledge about the process and its demands are disseminated freely, and fed back into continual process improvement, balancing competing and/ or complementary stakeholder demands.

In such circumstances where there are clearly defined quality 'levels', the purpose of strategic improvement is to progress between the levels, addressing internal barriers and redesigning processes, structures and relationships to better support the networks which provide better certainty and control over the operational environment. Progression to be world-class involves two elements: the first of those is ascending those levels, building both the expertise in the business process but also process improvement. Secondly, once a world-class performance is delivered, being world class ensuring the continual evolution of the communities, networks and relationships that provide world-class performance within a shifting context – there is a degree of reflexivity and self-awareness of those charged with process management.

This has clear applicability to the university context, in that a strategy for university seeking to be world class in terms of its engagement should seek to identify how the university currently performs, identify how that performance can be improved, and then an action plan developed to progress to that performance. However, that implies that there is an existing level-based model of university progress towards engagement activity, based on an increasing sophistication of university relationship management with its communities, in parallel with an increasing volume of engagement outcomes in terms of benefits to those communities.

In Charles & Benneworth (2002) we proposed a set of benchmarking tools for benchmarking university processes based on the same approach as that outlined above. For a set of 33 university engagement processes, three levels were distinguished at which universities could potentially perform. An example of one of these variables is given below, which also distinguishes three implicit performance levels.

Benchmark 1.1 Engagement in regional infrastructure planning and assessment

Type Practice.

Rationale

Regional competitiveness is in part dependent on adequate infrastructure. HE does not have a direct involvement in the provision of infrastructure (with the exception of its own facilities), but can assist regions in identifying infrastructure needs and providing evidence for benefits. The benchmark asks whether the institution has capacity to provide such advice, and if such advice is offered.

Sources of data

Internal assessment by reference to research strengths and impact on local infrastructure policy.

Good practice

Regional infrastructure investments come in a variety of forms, such as transport, energy, information and communication technologies, and business parks. Most HEIs will have some activities that relate to such investments, whether it is a business school looking at demand aspects or a civil engineering department. Departments or units may undertake research into regional infrastructure needs, either under contract to regional bodies and firms, or as part of supervised student projects. At an institutional level, HEIs should be aware of the work that is being undertaken. They should also ensure both that regional partners are aware of the capacity and competences available in institutions, and that results are effectively disseminated within the region as an input to RDA strategies.

Levels

| 1 | 2 | 3 | 4 | 5 |
|--|---|--|---|---|
| No engagement in regional infrastructure planning or assessment, despite the existence of relevant skills and knowledge. | | Departmental level activity to identify regional infrastructure needs on an ad hoc basis through local contracts etc. But no institutional recognition of this expertise or link with regional strategy. | | Departmental level expertise and knowledge is recognised centrally and built into strategic discussions with regional partners. |

Source: Charles & Benneworth (2002)

This again runs the risk of relegating the question of what is good practice in university management to a sum of the good management practices for each of the different university engagement processes identified in this report. Universities are complex institutions, and where such an approach falls short is that it does not address explicitly the fact that difficulties may emerge when universities try to create the background conditions under which these various engagement phenomena can thrive. An alternative approach to classifying engagement levels is offered by Ruiz Bravo (1992) who in attempting to classify how universities *qua* institutions progress in engaging and communicating, offers a five fold classification, based on commonalities of functionalism, scope and commitment to engagement, each mode of governance representing a qualitative improvement on the preceding level. These levels correspond to the *sophistication* with which the university organises its engagement:-

1. Providing information
2. Public Relations
3. Dissemination of academic findings
4. University as a cultural influence
5. Critical engagement

Further detail on these five sophistication levels for university engagement is given on the table on the following page. What is important to note in this classification is the fact that it is additive, so that the outcomes and activities which take place at higher levels include those already taking place at the lower levels. So a university engaging through a “public relations” mode will provide information as well as involving itself in social forums in an informal way. Progression between the classes involves developing the capacities which can deliver new kinds of activities and outcome whilst not undermining what has already been achieved.

6.2.2. Can seeking engagement quality undermine outcome values?

Before seeking to operationalise Ruiz Bravo’s model at the institutional level, the issue of process as against outcome quality must be returned to. The concept of ‘quality’ as used in this context is defined as ‘maximising control over outcomes in a variable or uncertain outcome’ rather than making a judgement on the value or worth of those outcomes. In general terms this implies that if you set out to do something deliberately poorly, low value outputs can still be produced to high quality if the process through which it is produced is effectively managed and improved. This is a salient point in this context because acknowledging the diverse nature of higher education means equally accepting a diversity of what universities can potentially achieve. For some universities and HEIs, ‘world-class’ engagement from its perspective may be small scale or tangential.

However, it is worth also reiterating the point that we are here concerned with quality of engagement in Newcastle University. The North East of England is a region which has much to gain from university engagement, and the university has established as its mission maximising its benefits for the city and region in which it is located. The university was founded as a ‘place of useful knowledge’ with a culture which should allow a relatively high level of engagement, and indeed a natural base-load of engagement across its disciplinary base. Therefore, it seems unlikely that Newcastle

University could construct a world-class engagement process that did not also involve making significant impacts on its host city and region.

Table 6 A developmental model of modes of university/ society engagement with external communities

| Mode of engagement | Characteristics of relations | Objective of engagement | University aim | Scope of societal response | Typical examples |
|---------------------------------------|---|---|---|---|--|
| 1: Providing information | Indirect: general public awareness raising | Informing society of university's plans, projects, opportunities and problems | Providing a positive image for HE in society, and being open about activities | "The university exists and is socially important" | News bulletins, press releases, commentaries, media announcements |
| 2. Public Relations | Direct university presence, but temporary and topic specific | Providing information; developing community rapport; shared events. | Achieve acceptance of university as active social partner (more activity...) | "The university is a present, active community participant" | University representatives in cultural and arts groups; informal discussions |
| 3. Dissemination of academic findings | Direct university participation in societal debates and discussions | Dissemination of university knowledge base in teaching & research | Shape public opinion, build and strengthen a critical learning society | Reflection on university position, then acceptance, rejection, critique | Conferences, round-tables, congresses, symposia, seminars, exhibitions |
| 4. University as a cultural influence | Direct, permanent social presence as partner; reactive to community demands | Improve academic thinking & discussions with critical societal perspectives | Promote reflexive attitudes in community and desire to evolve | New demands on university from social partners; new forms of action | Capacity-building courses, technical assistance, advisory services, free chair |
| 5. Critical engagement | Joint continuous, planned university/ community interaction & governance | Enriching societal development fed back into university practices | Forming a transformatory societal coalition based on reflective principles | Active participation in developing activities and driving change | Participatory social change in social/ economic/ environmental fields |

Source: Ruiz Bravo (1992) (translation: P L Younger).

6.3. Community engagement within one institution

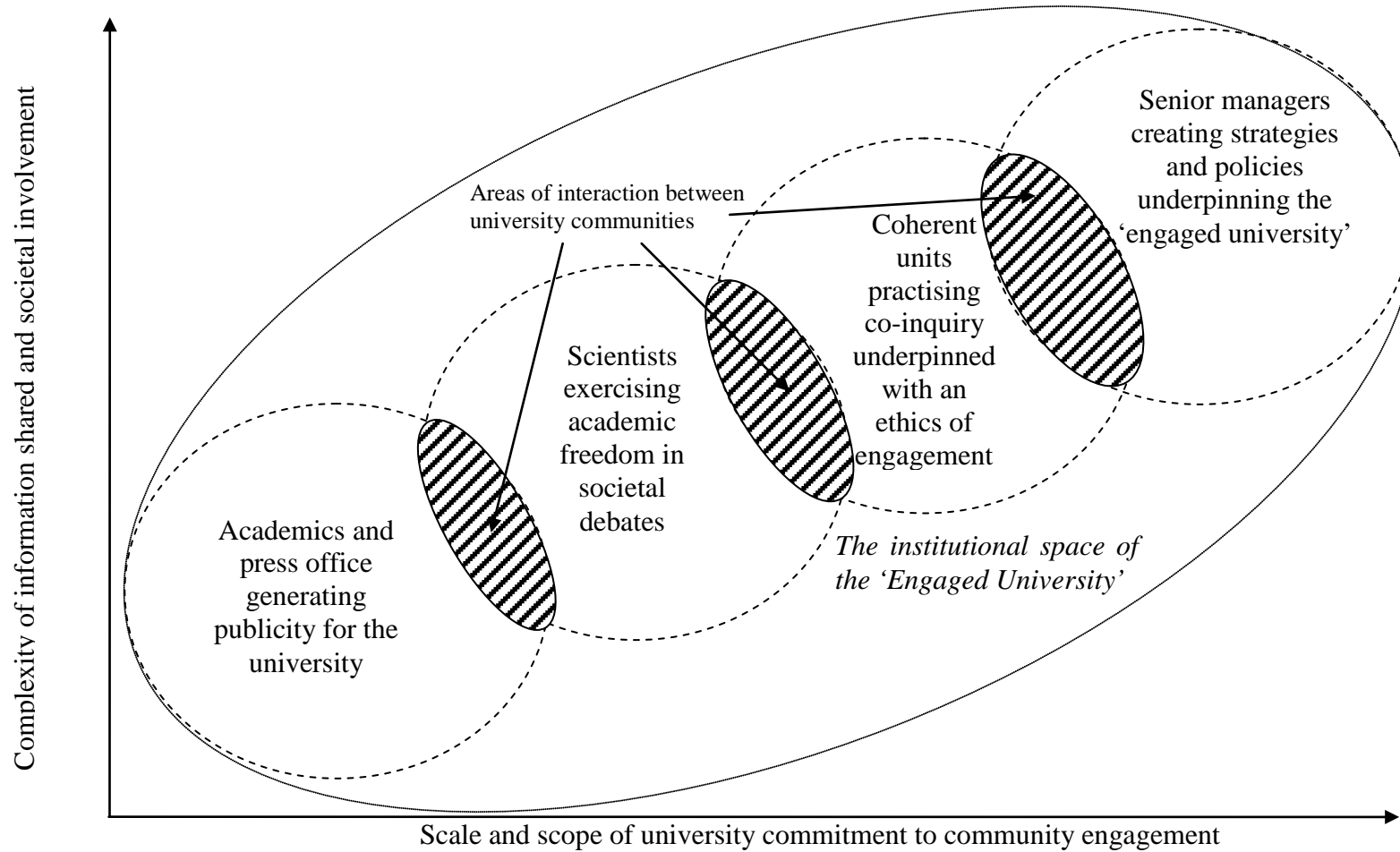
These levels also provide a means for explicating what it means to be world class in terms of engagement. World-class engagement in this classification is that of “critical engagement”, involving “joint continuous, planned university/ community interaction & governance”. It is this last characteristic which raises the greatest challenge for developing an engaged university. That arises from the fact that universities are and have always been, as Baumunt (1997) reminds us, quintessentially post-modern universities.

They are complex, and have a range of interests and activities that always do not fit neatly together. The institution of university has evolved fuzzy macro-governance processes in order to hold these sometimes competing rationalities and activities together (Barnett, 2003). Although universities have in recent decades adopted more managerialist approaches to their governance, this trend has been extensively critiqued as failing to adequately capture the essence of what a ‘university’ is (Harding *et al.*, 2007). The complex nature of universities means that their internal groupings are loosely coupled with inter-linkages and inter-dependencies not always immediately evident (Greenwood, 2007). This can result universities not always reacting predictably to managerialist changes.

This is not to say that universities cannot be effectively managed or led, but that the issue of university institutional management is widely accepted as being more complicated than some commentators might suggest. Writers such as Clark (1998) have highlighted that in cases where university successfully adopt new missions, high-level leadership creates enabling environments where institutional environments can populate those environments with successful and effective experiments. Within the Ruiz Bravo model, these different elements emerge at different stages of the evolution process, and it is almost suggested that engaged university institution leadership only emerges at the end of this learning process.

Whilst Ruiz Bravo does nowhere state make that argument, and it is clear from Clark *et al.* that university leaders are important in shaping engagement cultures within universities, there is an important point that different modes of engagement – the sophistication levels – may well be evident simultaneously within one institution. The issue then becomes one of consolidating and taking forward those different modes of engagement already underway in that institution, and creating space for individuals to take up those opportunities in enterprising ways. Any strategy for change needs to consider current capacities and how to develop those to the next level, as well as building the necessary relationships and structures to allow those capacities to function at the desired higher level. Becoming world-class in engagement terms involves a slow institutional evolution, optimising relationships with communities to maximise outcomes. We attempt to depict this model in the figure on the following page.

Figure 1 The overlapping communities of interest within a world-class engaged university



The world class engagement university holds together a set of diverse internal groupings; some are engaged in relatively small scale engagement with limited impacts, whilst at the other end of the scale, the university is committed to a number of strategic developments with lead (external) community partners, as well as engaged research centres and individuals exercising the academic freedom to contribute to and shape societal debates. Internal activities that encourage engagement and interchange between two internal groupings are important, particularly in building an institutional recognition that engagement is institutionally valid.

6.4. Seven ‘wicked issues’ for world class university engagement

The reality of university engagement strategies that are successful is that they will include elements of the three areas covered in 6.1, 6.2 and 6.3. They will be based around improving the overall strategic capacity of the university for successful engagement (6.3), they will be split into particular thematic engagement areas and seek to optimise engagement processes (6.2) and they may well include ideas of examples of best practice that can be introduced and applied in that particular context (6.1).

Using this as a heuristic for the strategy development process, the conclusion to the report is to highlight seven issues of which those constructing the strategy should be mindful in order to maximise the likelihood for success. To tease out some of the issues which arise in managing the tensions and conflicts around engagement within a single institution, the final section of this chapter looks to six ‘wicked issues’ of which those developing engagement strategies for universities should be mindful.

Seven wicked issues for developing a world class university engagement strategy:-

1. Engagement opportunities are shaped by university policy and cultures at all levels
2. Multiple internal groups within the university must be satisfied by ‘engagement’
3. You must not lose sight of the mundane whilst chasing the exciting
4. External pressures and shocks will influence what can successfully be achieved
5. External societal actors are not the only stakeholders to whom universities are accountable
6. Engaging is experimental, and some experiments will unavoidably fail
7. Engagement must not be a back route for approving undeserving projects

6.1.1. The implicit drivers of university engagement

Any university involves a wide range of strategies and policies which are drawn up in response to a range of external demands and drivers. These strategies and policies can which can affect the capacity of individuals and units within a university to engage in

ways that might not necessarily be anticipatable at the outset. One of the most obvious issues is the question that in a university with many strategies, which are those strategies which really set the tone and context for what the university achieves. For an engagement strategy, which potentially may remain peripheral, this raises the question of how can that strategy achieve a profile and positive attention within the university.

Another set of issues appeared implicitly within chapter 5 such as policies for room use by community groups or promotions policies. These policies can make impossible engagement by all but the most committed individuals, which in turn makes increasing the scope – and hence the level – of engagement very difficult. A rationale underpinning a room-charging policy (to take one example) of avoiding unfair competition with other conference facilities might make it unduly difficult to bring excluded communities onto campus. Policies and exceptions take time to create, and the delays that this may bring can disrupt building a cross-institutional sense of progress that engagement is achievable. Yet, addressing these issues will be necessary if the university is to achieve its potential in terms of engagement.

6.1.2. Holding multiple groupings together within one institution

The preceding point raises the issue that it is important that engagement is accepted by staff at all levels as something that they firstly should be doing (morally/ ethically), and secondly, that it is something possible for them to do. This can be made more difficult by the fact identified in 6.3, that universities are comprised of different communities, which might have different ethical perspectives on appropriate roles and missions of universities. Another way of thinking it is that different internal groupings within the university will have different tolerances for engagement, and what is important is the identification of engagement activities which do not broach the limits to internal tolerance, but at the same time encourage people to be more generally supportive or tolerant of, or at least less apathetic to, engagement activity.

Engagement often falls within debates around relevance and excellence – with some assuming that relevance precludes excellence whilst others assume it is a precondition. These kinds of ethical tensions can make it very difficult to retain the different communities within a single institution, and can lead the losers in those debates being pushed to the peripheries of universities' institutional structures and potentially even expelled.

There are issues around managing tensions between the various communities, particularly where they have very different views of the role and purpose of higher education. The role for management and strategy in such cases is to actively make the case that diversity of opinions strengthen the university as an institution, and are to be encouraged, rather than falsely choosing one particular side of the divide to favour. 6.3 highlights the point that there will be individuals and activities that span the communities, and one solution is to construct solutions that span different communities, and create benefits which are appreciated more generally. This is not merely a question of perceptions – the cleavages within communities in an HEI can be very real and very difficult to reconcile, and part of this issue is sustaining a constructive ambiguity around engagement (something which the university institution has been very effective at doing through the ages), thereby allowing the way it is defined in a single institution offer something to everyone.

6.1.3. Balancing the exciting and the mundane

An important part of the evolution of a university's culture of engagement is in preserving the niches where those lower level activities take place, those which may be seen as more functional and symbolic in nature, such as press releases and the exercise of academic freedom. It is only natural that strategic documents focus on the new activities and structures which are being proposed. But the corollary of this is that strategies may thereby potentially fail to support – and as a consequence of this to unthinkingly disrupt – those lower-level activities. Staff in university engagement offices (where they exist) often complain that they are forced into projects, and when those projects end, those staff are redeployed to unrelated areas. The result is the activities – and the learning those staff have of *how* to engage – is lost to the university, precisely at a time when the university may wish to build up its knowledge base around engagement.

Universities' post-modern nature is a consequence of the fact that they are loosely coupled communities with different kinds of interests. This loose-coupling is often underplayed by financial visions of the university which stress the inter-changeability of units and competition for internal resources, rather than their networked interdependence and complementary roles. This means that in reality, a university with world-class engagement will involve a mix of communities and levels engagement. Whilst some academics may restrict their engagement to a functional and information level, in the world-class engaged university, other elements will be widely networked into societal partners working together to co-develop new academic and societally useful knowledge. It is strategically challenging to place these different kinds of activities on the same strategic level, but it can be highly destructive to subordinate the smaller-scale modes of engagement to new, high-level alluring projects.

6.1.4. Managing external pressures on engagement activities

Although it has not been possible to deal systematically in this review with the impacts of variations in external policies and cultures on engagement, it is clear that there is huge variation between countries in what can be achieved in terms of engagement. The wider context within which engagement takes place shapes what universities can achieve, but this context evolves over time as well as being subject to disjunctures. The general predisposition – the culture – of engagement has changed markedly since the 1970s, when it was seen that commerce had no place inside the campus, with the rise of the entrepreneurial university (Grit, 2000) replacing what he terms the critical university.

In the last five years, there has been a divergence of engagement performance within the territories of the UK arising from the differing accents that the four UK funding councils have placed on universities' societal roles and the place of university contributions. The implication from this is that effective engagement strategies must both play to the grain of cultural change as well as retaining a flexibility to adapt to external shocks.

6.1.5. Satisfying core university stakeholders

Implicit in the idea of the university as a complex and post-modern institution is the sense that universities have a range of communities to which they have responsibilities and must demonstrate accountability, within the general set of relationships comprising the

social compact. This has very much been taken as a foundation for this review. Yet as Jongbloed & Salerno (2007) point out, not all stakeholders and communities are equally powerful, and universities have some ‘critical’ stakeholders: those providing universities directly with money, legitimacy and knowledge. If engagement is to succeed, it must take place in such a way that the interests of these stakeholders are not neglected, compromised or damaged.

In most situations, the most imminent stakeholders are research & funding councils alongside government ministries and parliaments. Fortuitously, these bodies have in recent years been increasingly supportive of university community engagement, particularly with the business community. Yet, certain types of engagement may remain implicitly discouraged or explicitly forbidden by these regulatory regimes; it is currently very difficult to find funding for non-accredited community education, for example. Strategies must recognise the environment in which they operate and the need to satisfy certain core stakeholders’ requirements.

As an aside, it is true that stakeholders’ perceptions of what is important are not static, and do evolve over time. Policy-makers do use concrete examples of success which can act as role-models and inspirations for new policies and instruments. Successful examples of engagements which challenge regulatory barriers can lead to stakeholders removing those barriers. There may be occasions where there is value in confronting these core stakeholder interests. However, these occasions are in all likelihood very limited, and a university choosing such an approach under the guidance of an external promoter has a greater certainty that the approach does not threaten disaster.

6.1.6. Accepting the experimental nature of evolving practices

Building capacity in community engagement by universities is an experimental activity, and involves taking risks appropriate to the desired level of outcome. One dimension of this is that it is inevitable that certain activities will fail, not least because of their dependence on external environments which may adversely shift in the course of a project. A sign of institutional weakness is to completely abandon failures, and draw exclusively the lesson that the risks of failure associated with new modes of engagement are not worth taking. A more sophisticated view of a failure is that there will be elements worth continuing, lessons to be learned, and people who have learned new skills that might usefully be deployed (*cf.* 6.4.3).

These problems – which are part of a more general class of problems around institutional changes which arise because they challenge particular sets of vested interests – are magnified because of the sensitivity of engagement as an activity, and the fact that there will be communities that see engagement as contrary to excellence. Failure of engagement activities may precipitate a back-lash from more recalcitrant elements who use those failures to develop a stronger institutional narrative urging the abandonment of engagement, possibly arguing engagement undermines excellence. This issue of the need to take risks and learn lessons needs to be dealt with explicitly at the outset to allow subsequent evolution to consolidate on what is achieved.

6.1.7. Avoiding special interest pleading

The final issue in designing a strategy for engagement is to avoid the situation where ‘engagement’ becomes a mechanism that short-circuits regular decision-making and governance procedures. Given the pressures that exist from core stakeholders, from sceptical internal communities and with risky projects, there can be the temptation to avoid proper scrutiny of proposals for engagement. This is commonly experienced in the field of innovation policy, where there is often a risk that when it is decided to adopt an innovation approach, partners come to the table with formerly unsuccessful proposals ‘dressed up’ in a language of innovation; in order to preserve the unity of the coalition, bad proposals are reluctantly accepted, with the result that the approach is set up to fail, and the concept is discredited (*cf.* 6.4.6).

This is very problematic in the field of engagement because of the need for genuine experimentation and learning about what works and what can be done better. It is useful to recall that there is no silver bullet for engagement, and that large flagship projects and charismatic leadership will not in themselves make a successful engaged institution. Although it can be time-consuming and long-term, building up capacity in an evolutionary manner should give all those involved in university decision-making around engagement activities and structures the knowledge and confidence to select a portfolio of engagement activities that ultimately rebuild the university as an engaged institution.

7. BIBLIOGRAPHY

Ackoff, J. (1999) *Ackoff's best: his classic writings on management*, New York, John Wiley.

Adviesraad voor Wetenschaps- en Technologiebeleid (2007), Alfa en Gamma stralen. Valorisatiebeleid voor de Alfa- en Gammawetenschappen, Rijswijk: AWT

Allen, M. (1988) *The Goals of Universities*, Milton Keynes: Society for Research into Higher Education/ Open University Press.

Alliance for Regional Stewardship, American Association for State Colleges and Universities, and National Center for Higher Education Management Systems (2006) *Tools and Insights for Universities called to Regional Stewardship (Making Place Matter)*, ARS, Denver CO.

Allison, J. and Keane, J. (2001) 'Evaluating the role of the Sunshine Coast University', *Local Economy*, 16, 123–141

Alvarez, A., Badenhorst, A. and Burnheim, C. (2005) *RMIT University and its Communities: Engagement and Social Responsibility, Engaged Perspectives: An Occasional Working Paper Series*, Eidos, Brisbane.

American Association for State Colleges and Universities (2002) *Stepping forward as Stewards of Place: A guide for Leading Public Engagement at State Colleges and Universities*, AASCU, Washington DC.

American Association for State Colleges and Universities (2005) *Renewing the Promise: The Public's Universities in a Transforming World*, AASCU, Washington DC.

Aquino Febrillet, M. (2006) "Las reformas de Córdoba: 88 años después". *DiarioDigitalRD* (Dominican Republic). Available on-line at: http://diariodigital.com.do/?module=displaystory&story_id=6187&format=html (last accessed 2-2-2009)

AUTM (2008) *2006 U.S. and Canadian Licensing Activity Survey Full Report*, Deerfield, Illinois, USA: Association of University Technology Managers.

Azócar, R.E. (2006) *La extensión universitaria y sus retos en la Universidad del Siglo XXI*. FIAP (Foro de Investigación y Acción Participativa para el desarrollo de la sociedad del conocimiento). (Research and Participatory Action forum for the development of the knowledge society). www.fiap.org.es/colabora_11.htm (last accessed 11-2-2009)

Barnett, R. (2003) *Beyond all reason: living with ideology in the university*. Buckingham: Society for Research into Higher Education; Open University Press.

Barnett, R. (2000) "Realising a compact for higher education" in K. Moti Gokulsing & C. DaCosta (eds) *A compact for higher education*, Aldershot, Ashgate.

Barnett, R. and Griffin, A. (1997) *The End of Knowledge in Higher Education*, Cassell, London.

Bathelt, H., Malmberg, A. & Maskell, P., 2004, "Clusters and knowledge: local buzz, global pipelines and the process of knowledge creation" *Progress in Human Geography* 28 31-56Bender 1988

Baumunt, Z. (1997) "Universities: old, new and different" in A. Smith & F. Webster (eds) (1997) *The post-modern university? Contested visions of higher education in society*, Milton Keynes: Open University Press.

Benneworth, P. S. (2007) "Seven samurai opening the ivory tower? University commercialisation communities of practise promoting economic development in less successful regions" *European Planning Studies* 15 (4) pp. 487-511.

Benneworth, P. S., Charles, D. R., Conway, C., Hodgson, C., & Humphrey, L. (2009) "How the societal impact of universities can be improved both conceptually and practically" *Sharing Research Agendas on Knowledge Systems: Final Research Proceedings*, UNESCO: Paris, France.

Benneworth, P. Humphrey, L., Charles, D. R.; & Hodgson, C. (2008) "Excellence in community engagement by universities" paper presented to "Excellence and Diversity in Higher Education. Meanings, Goals, and Instruments" 21st Conference on Higher Education Research (CHER), Pavia, Italy, 10th-13th September 2008.

Benneworth P, Hospers G-J, 2007, "The new economic geography of old industrial regions: universities as global-local pipelines" *Environment and Planning C: Government and Policy* 25(6) 779-802

Bok, C. de & Mulder, H. "Wetenschapswinkels in de kennissamenleving" *Tijdschrift voor Hoger Onderwijs* 2004 iss. 3 pp 123-139.

Boucher, G., C. Conway and E. Van Der Meer (2003) 'Tiers of engagement by universities in their region's development', *Regional Studies* 37(9): 887-97.

Boyer, E. L. (1990) *Scholarship Reconsidered: Priorities of the Professoriate*, Carnegie Foundation for the Advancement of Teaching and Jossey-Bass, New York.

British Academy (2008), *Punching our Weight: the humanities and social sciences in public policy making*, London: British Academy

Burrows, J. (1999), Going beyond labels: a framework for profiling institutional stakeholders, *Contemporary Education*, Vol. 70, No. 4, pp. 5-10.

Cairncross F. (1997) *The Death of Distance: How the Communications Revolution Will Change Our Lives*. Texere, London.

Campbell, M., Devins, D., Foy, S., Hutchinson, J. and Walton, F. (1999) *Higher Education and Regional and Local Economic Development*, Council for Industry and Higher Education, London.

Cancino, H. (2004) "*El movimiento de reforma universitaria en Córdoba, Argentina, 1918. Para una relectura de su discurso ideológico*". *Sociedad y Discurso* (electronic journal of the Department of Spanish and International Studies, University of Aalborg, Denmark). www.discurso.aau.dk/cancino_nov04.pdf (last accessed 11-2-2009).

Centre for Educational Research and Innovation (1982) *The university and the community: the problems of changing relationships*, Paris: OECD

Charles, D. R. & Benneworth, P. (2002) *Evaluating the Regional Contribution of an HEI: A Benchmarking Approach*, Bristol, HEFCE

Charles, D. R. & Benneworth, P. S. (2001) *The regional contribution of higher education*, London: HEFCE/ Universities UK.

Charles, D.R. (2003) 'Universities and territorial development: reshaping the regional role of UK universities', *Local Economy* 18(1): 7–20.

Clark, B. C. (1998) *Creating entrepreneurial universities: organisational pathways of transformation*, Oxford: Elsevier Press.

Commission of the European Communities (2003) *The role of the universities in the Europe of knowledge COM(2003) 58 final*,

Cortez Ruiz, C. (2008) "Challenges and operations for university-based civic service in Latin America" in GUNI (ed) *Higher education in the world 3: new challenges and emerging roles for human and social development*, London: Palgrave Macmillan.

De George, R.T. (1997) *Academic Freedom and Tenure: Ethical Issues*, Rowman & Littlefield,

Debackere, K., De Smyter, N. & Hinoul, M. (2004) *Leuven Inc.: a story of five years of networking and innovation*, Leuven: KUL Press

Delanty, G. (2002) 'The university and modernity: a history of the present', in Robins, K. and Webster, F. *The Virtual University: Knowledge, Markets and Management*, OUP, Oxford.

Dobrée, B. (1943) "The universities and regional life" *Twenty-fifth Earl Grey Memorial Lecture*, Newcastle-upon-Tyne, King's College, 29th April 1943

Ernste, H. (2007) "The international network university of the future and its local and regional impacts" in A. Harding, A. Scott, S. Laske & C. Burtscher (eds) *Bright satanic mills: universities, regional development and the knowledge economy*, Aldershot: Ashgate

Etzkowitz, H. (2008) *The Triple Helix: University-Industry-Government Innovation In Action*, London: Routledge.

Feldman, M. & Desrochers, P. (2003) "Research universities and local economic development: lessons from the history of Johns Hopkins University" *Industry and Innovation* 10 (1) pp 5-24.

Filmer, P. (1997) 'Disinterestedness and the Modern university' in A. Smith & F. Webster (eds) (1997) *The post-modern university? Contested visions of higher education in society*, Milton Keynes: Open University Press.

Florida, R. (1999) 'The role of the university: leveraging talent not technology', *Issues in Science and Technology Online*, <http://www.nap.edu/issues/15.4/florida.htm> (accessed 19/7/02)

- Florida, R. (2002) *The Rise of the Creative Class*, Basic Books, New York.
- Fontes, M. & Coombs, R. (2001) 'Contribution of new technology based firms to the strengthening of technological capabilities in intermediate economies' *Research policy* 30 pp 79-97.
- Freire, P. (1970) *Pedagogy of the Oppressed*. Continuum Publishing, London. 164pp.
- Freire, P. (1994) *Pedagogy of Hope. Reliving Pedagogy of the Oppressed*. Continuum Publishing, London. 215 pp.
- Garlick, S. (1998) 'Creative Associations in Special Places' : Enhancing the Partnership Role of Universities in Building Competitive Regional Economies. Canberra: Department of Employment, Education, Training and Youth Affairs.
- Garlick, S. (2000) *Engaging Universities and Regions: Knowledge Contribution to Regional Economic Development in Australia, Evaluations and Investigations Programme (00/15)*, Department of Education, Training and Youth Affairs, Commonwealth of Australia.
- Garlick, S. and G. Pryor (2002) *Compendium of Good Practice University–Regional Development Engagement Initiatives*. Canberra: Department of Transport and Regional Services.
- Gibbons, M. (2003) Engagement as a core value in a mode 2 society, in S Bjarnason and P. Coldstream, *The Idea of Engagement: Universities in Society*, Association of Commonwealth Universities, London.
- Gibbons, M., Limoges, C., Nowotny, H., Schwatzman, S., Scott, P. and Trow, M. (1994). *The New Production of Knowledge*, Sage, London.
- Giménez Martínez, J.J. (2000) "La Extensión Universitaria en España". In *Proceedings of V Congreso Iberoamericano de Extensión*. Held at the Michoacana University of San Nicolás de Hidalgo, Michoacán, Mexico. 19 – 23 Nov 2000.
- Goddard, J.B. and Chatterton, P. (1999) *The Response of Higher Education Institutions to Regional Needs*, OECD, Paris
- Goddard, J., Charles, D., Pike, A., Potts, G. and Bradley, D. (1994) *Universities and Communities*, Committee of Vice-Chancellors and Principals, London.
- Goedegebuure, L., & Van der Lee, J. (2006) *In search of evidence – measuring community engagement a pilot study*, Brisbane, Australia: Eidos.
- Gomez, M.V. (2001) *Educación a distancia y cátedras libres: reflexionando sobre emergentes en el contexto de la educación latinoamericana*. In Torres, C.A., (ed), "*Paulo Freire y la agenda de la educación latinoamericana en el siglo XXI*". CLACSO, Buenos Aires (ISBN 950-9231-63-0). (CLACSO: *Consejo Latinoamericano de Ciencias Sociales* - the Latin American Council of Social Sciences). On-line version published by CLACSO at <http://bibliotecavirtual.clacso.org.ar/ar/libros/torres/mvgomez.pdf> (last accessed 11-2-2009).
- Gnaiger, A, & Martin, E. (2001) "Science shops: operational options" *SCIPAS Report No. 1*, SCIPAS: Utrecht, Netherlands.

- Greenwood, D. (2007) "Who are the real problem-owners" in A. Harding, A. Scott, S. Laske & C. Burtscher (eds) *Bright satanic mills: universities, regional development and the knowledge economy*, Aldershot: Ashgate
- Grit, K. (2000), *Economiseren als probleem: een studie naar de bedrijfsmatige stad en de ondernemende universiteit*, Van Gorcum, Assen.
- Gunasekara, C. (2006), 'Leading the horses to water: the dilemmas of academics and university managers in regional engagement', *Journal of Sociology*, 42, 145-163.
- Hall, B. L. & Dragne, C. (2008) "The role of higher education for human and social development in the USA and Canada" in GUNI (ed) *Higher education in the world 3: new challenges and emerging roles for human and social development*, London: Palgrave Macmillan
- Harding, A, Scott, A., Laske, S. & Burtscher C. (eds) *Bright satanic mills: universities, regional development and the knowledge economy*, Aldershot: Ashgate.
- Harloe, M. and B. Perry (2004) 'Universities, localities and regional development: the emergence of the "mode 2" university?', *International Journal of Urban and Regional Research* 28(1): 202.
- Harvie, C. (1994) *The Rise of Regional Europe*, London: Routledge.
- Hart, A. and Wolff, D. (2006) 'Developing local 'communities of practice' through local community-university partnerships', *Planning, Practice & Research*, 21, 121-138.
- Higher Education Funding Council for England (2004) *Student volunteering: case studies of good practice from HEACF:Projects funded by the Higher Education Active Community Fund; case studies compiled by the Careers Research and Advisory Centre, HEFCE Good Practice report 2004/21*, HEFCE, Bristol.
- Higher Education Funding Council for England (2006) *Beacons for Public Engagement, 2006/49*, HEFCE, Bristol.
- HEFCE (2008) *Higher Education Innovation Fund round 4: Invitation and guidance for institutional strategies*, Bristol: Higher Education Funding Council for England.
- Jongbloed, B. Enders, J & Salerno, C. (2007) "Higher education and its communities: interconnections, interdependencies and a research agenda" *Higher Education*, 56 (3) pp 303-324.
- Kellogg Commission (1999) "Returning to Our Roots: The Engaged Institution" Third report of the Kellogg Commission, Washington DC: National Association of State Universities and Land-Grant Colleges, available online at: <http://www.nasulgc.org/NetCommunity/Document.Doc?id=183>
- Kellogg Commission on the Future of State and Land-Grant Universities (1999) *Returning to our Roots: The Engaged University*, Third report, National Association of State Universities and Land-Grant Colleges, Washington DC.
- Kennedy, D. (1997) *Academic Duty*, Harvard University Press, Cambridge MA.

- Kline, S. J. and Rosenberg, N. (1986) 'An overview of innovation', pp. 275-304 in R. Landau and N. Rosenberg (eds.) *The Positive Sum Strategy: Harnessing Technology for Economic Growth*. Washington, D.C., National Academy Press.
- Klofsten, M. & Jones-Evans, D. (2000) "Comparing academic entrepreneurship in Europe: the case of Sweden and Ireland" *Small Business Economics* 14 (2) pp 299-309.
- Kuhn, T. (1962) *The Structure of Scientific Revolutions*, Chicago: Univ. of Chicago Press
- Latour, B. B. & Woolgar, S. (1979) *Laboratory Life: the Social Construction of Scientific Facts*, Sage, Los Angeles
- Leisyte, L., Steen, M van der, & Enders, J. (2008) "Professional Autonomy in English and Dutch universities: the Influence of Reforms on the Research Practices in Public Research Universities" Paper presented to the *Prime-Latin America Conference*, Mexico City, Mexico, September 24-26 2008.
- Lindsey, G., Ottensmann, J., Palmer, J. Wilson, J., & Tutterow, J. (2005) "Encouraging smart growth in a sceptical state: university-stakeholder collaboration in Central Indiana" in W. Wiewel, & G.J. (eds) *Partnerships for smart growth: university-Community collaboration for better public places*, New York: M. E. Sharpe.
- Lotz, J., and Welton, M.R. (1997) *Father Jimmy. The Life and Times of Father Jimmy Tompkins*. Wreck Cove (NS): Breton Books. 169pp.
- Lundvall, B.A. (1988) 'Innovation as an interactive process: from user-producer interaction to the national system of innovation', in G. Dosi (ed), *Technical Change and Economic Theory*, London: Pinter.
- Lundvall, B-Å. and B. Johnson (1994) "The learning economy", *Journal of Industry Studies*, 1, 23-42.
- Lundvall, B-Å. and Borrás (1997) *The Globalising Learning Economy: Implications for Innovation Policy*, Office for Official publications of the European Communities, Luxembourg.
- MacLeod, G. (1997) *From Mondragon to America: Experiments in Community Economic Development*. Sydney (NS): University College of Cape Breton Press. 186pp.
- Malecki, E. (1997) *Technology and economic development*, London: Longmans.
- Marginson, S. and Considine, M. (2000) *The Enterprise University: Power, Governance and Reinvention in Australia*, Cambridge University Press, Cambridge.
- Marginson, S. (2007) "University mission and identity for a post post-public era", *Higher Education Research and Development*, 26 (1), pp. 117-131.
- Maurrasse, D.J. (2001), *Beyond the Campus: How Colleges and Universities Form Partnerships with Their Communities*, Routledge, New York.
- McDowell, G. (2001) *Land Grant Universities and Extension into the 21st Century: Negotiating or Abandoning a Social Contract*, Iowa State University Press, Ames, Iowa.

McDowell, G. R. (2003) 'Engaged universities: lessons from the land grant universities and extension' *Annals of the American Academy of Political and Social Science*, 585, 31-50.

Metrics Expert Group (2006) "Use of research metrics in the arts and humanities" A report to the Arts and Humanities Research Council and the Higher Education Funding Council for England

Morgan, K. (1997), "The Learning Region: Institutions, Innovation and Regional Renewal", *Regional Studies*, Vol. 31, No. 5, pp. 491-403

Morgan, R. (2004) *Perseverance. The Story of Cape Breton's University College*. Sydney (NS): University College of Cape Breton Press. 208pp.

National Committee of Inquiry into Higher Education (1997), *Higher Education in the Learning Society*, Chapter 12: The Local and Regional Role of Higher Education. HMSO, London

Neave G. (2006), *Redefining the social contract*, Higher Education Policy, Vol. 19, pp. 269-286.

Office of University Partnerships (1999) *University Community Partnerships—Current Practices*, Volume 3, available online at: <http://www.oup.org/files/pubs/currentpractices3.pdf>

Ohm, B. (2005) "Universities as participants in planning enabling statute reform" in W. Wiewel, & G.J. (eds) *Partnerships for smart growth: university-Community collaboration for better public places*, New York: M. E. Sharpe.

Organisation for Economic Co-operation and Development (2007) *Higher education and regions: globally competitive, locally engaged*, Paris: OECD.

Ostrander, S.A. (2004) 'Democracy, civic participation and the university: a comparative study of civic engagement on five campuses', *Nonprofit and Voluntary Sector Quarterly*, 33, 74-93.

Perry, D.C. and Wiewel, W. (2005) *The University as Urban Developer*, M.E. Sharpe, Armonk, New York.

Phillipson, N. T. (1974) "Culture and society in the 18th century province: the case of Edinburgh and the Scottish Enlightenment" in L. Stone (eds) *The University in Society: Volume II – Europe, Scotland and the United States from the 16th to the 20th Century*, London: Oxford University Press pp. 407-448.

Queensland University of Technology (2007) *Perspectives on Community-University Engagement*, QUT, Brisbane.

Readings, B. (1996) *The University in Ruins*, Harvard University Press.

Reichert, S. (2006) *The rise of knowledge regions: emerging opportunities and challenges for universities*, Brussels: European Universities Association

Romer, P. M. (1986) "Increasing returns and long-term growth" *Journal of Political Economy*, 94 (5) pp 1002–1037

Romer, P. M. (1994) "The origins of endogenous growth" *Journal of Economic Perspectives* 8 (1) pp 3-22.

Röpke, J. (1998) *The Entrepreneurial University: Innovation, academic knowledge creation and regional development in a globalized economy*, University of Marburg, (<http://www.wiwi.uni-marburg.de/Lehrstuehle/VWL/Witheo3/documents/entreuni.pdf> accessed 20/11/2007)

Ruiz Bravo, R. M. (1992) *Hacia una difusión cultural universitaria*. (Towards an academic cultural dissemination strategy). Heredia (Costa Rica): Universidad Nacional (in Spanish).

Ruiz Bravo, R. M., Meoño Soto, R., Juárez Matute, O., Rodríguez Sánchez, G., and Rojas Herrera, S.E. (2008) *Acompañamiento Social Participativo: un espacio de encuentro para el desarrollo comunitario. Programa de Desarrollo Integral de Isla Venado*. Heredia (Costa Rica): Universidad Nacional (in Spanish). 390pp.

Sharp, M. (1990) "The Single Market and European Policies for Advanced Technologies" in C. Crouch & D. Marquand (eds) *The Politics of 1992: Beyond the Single European Market*, Oxford: Blackwell

SKOHBO (2005) "Succesfactoren voor lectoraten Lectoren en Kenniskringen" Tussentijdse Evaluatie Rapport van de Commissie, Den Haag: Stichting Kennisontwikkeling HBO. Available on-line at: <http://www.skohbo.nl/upload/bestand/evaluatieSuccesfactoren.pdf>

Solow, R. (1994) "Perspectives on growth theory" *Journal of Economic Perspectives* 8 (1) pp 45-54.

Smith, R. G. (2003) "World city actor-networks" *Progress in Human Geography* 27 (1) pp 25-44.

SSHRC (2008) *The Economic Role and Influence of the Social Sciences and Humanities: A Conjecture*, Ottawa: SSHRC

Storper, M. (1995) "The resurgence of regional economies ten years later: the region as a nexus of untraded interdependencies", *European Urban & Regional Studies* 2 (3) pp. 191-221.

Subotzky, G. (1999) 'Alternatives to the entrepreneurial university: new modes of knowledge production in community service programs', *Higher Education*, 38, 401-440.

Talloires Network (2005) "Strengthening the civic roles and social responsibilities of higher education" *Report of the 2005 Talloires Conference 2005*, Medford, MA: Tufts University Office Of Publications. Available online at: <http://www.tufts.edu/talloiresnetwork/conference.shtml>

Tandon, R. (2008) "Civil engagement in higher education and its role in human and social development" in GUNI (ed) *Higher education in the world 3: new challenges and emerging roles for human and social development*, London: Palgrave Macmillan.

Taylor, J. (2001), 'The impact of performance indicators on the work of university academics: evidence from Australian universities', *Higher Education Quarterly*, 55, 42-61.

Temple, J. (1998) 'The New Growth Evidence' *Journal of Economic Literature*, 37 (1) pp. 112-156.

Thompson, E P (1970) Warwick University Ltd. Penguin, London.

Tommasino, H., Gonzalez Marquez, M.N., Guedes, E., and Prieto, M. (2006) "*Extensión Crítica: Los Aportes de Paulo Freire*" In Tommasino, H., and de Hegedüs, P. (eds) *Extensión: Reflexiones para la intervención en el medio urbano y rural*. (Engagement: reflections for activities in urban and rural environments). (In Spanish). Universidad de la República, Uruguay. pp. 121 – 135.

US Department of Housing and Urban Development, Office of Policy Development and Research, (2000) *Colleges and Communities: Gateway to the American Dream*. The State of the Community Outreach Partnership Centres Program, 2000, HUD, Washington DC.

Vaassen, P. & Van der Velde, M. (2003) "University knowledge transfer through social and professional embeddedness: a case study" in F. Boekema, E. Kuypers, R. Rutten (eds) *Economic Geography of Higher Education: Knowledge, Infrastructure and Learning Regions*, London: Routledge

U-Map (2008) *Mapping Diversity Developing a European Classification of Higher Education Institutions*, Enschede: CHEPS

Watson, D. (2007), *Managing Civic and Community Engagement*, Milton Keynes: Open University Press.

Wenger, E. (1998) *Communities of Practice: Learning, Meaning, and Identity*, Cambridge University Press, Cambridge.

Wenger, E. (2004) 'KM is a doughnut: shaping your knowledge strategy through communities of practice', *Ivey Business Journal*, January-February

Wenger, E., McDermott, R. and Snyder, W. (2002) *Cultivating Communities of Practice: A Guide to Managing Knowledge*, Harvard Business School Press, Cambridge MA.

Wiewel, W. & Knaap, G.J. (2005) (eds) *Partnerships for smart growth: university-Community collaboration for better public places*, New York: M. E. Sharpe.

Wiewel, W. & Knaap, G.J. (2005) "Introduction" in W. Wiewel, & G.J. (eds) *Partnerships for smart growth: university-Community collaboration for better public places*, New York: M. E. Sharpe.

Williamson, O. E. (1975) *Markets and hierarchies: analysis and antitrust implications*, New York: The Free Press.

Winter, A., Wiseman, J and Muirhead, B. (2006) 'University-community engagement in Australia: practice, policy and public good', *Education, Citizenship and Social Justice*, 1, 211-230.