

# **Supporting the Contribution of Higher Education Institutions to Regional Development**

## **The OECD Programme on Institutional Management in Higher Education (IMHE) with the support of the Higher Education Funding Council for England (HEFCE)**

### **North East England Case Study Report**

Prepared by David Charles, Cheryl Conway, Helen Pickering, Jean Tennant, Swayan Chaudhury and Peter Allan, with inputs from the universities of the North East, and regional partners.

## **ACKNOWLEDGEMENTS**

This self assessment report was undertaken through a process of wide consultation within the universities and in conjunction with regional partners.

In particular the process was supported by a steering group drawing on representatives of business and regional public bodies and chaired by Peter Allan, formerly managing partner of the law firm Ward Hadaway and now semi-retired. Peter as independent chair provided enthusiastic and skillful leadership in the steering group, and acted as host on several occasions for meetings associated with the project. A working group representing the universities in the region and including regional partners contributed to the report with information and comments on the text.

With the support of the steering group several consultation meetings and events were held to capture the views of a wider business and policy community

It must be emphasized though that this research is focused on the universities of the North East and their contributions to regional development. It is not a review of regional development in the region or an evaluation of those regional agencies and programmes that do not involve the universities. It is also not a study of other parts of the education system except where they interact with the universities. There is an element of higher education provision in the region which is undertaken by the further education colleges, and this is mentioned where relevant, but the study does not examine the colleges as institutions given that the majority of their activities are in the delivery of FE rather than HE.

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## CAPACITY BUILDING SWOT ANALYSIS

### Strengths

- Rapid growth of the university sector in the region which consists of six institutions: Durham University, University of Newcastle, Northumbria University, University of Sunderland, University of Teesside, and the Regional Office of The Open University. In 2003-4 these institutions had a total income of £726m which resulted in an estimated £975m worth of expenditure in the region including staff and student spending. This had an estimated additional impact elsewhere in the regional economy of over £554m making a total contribution of nearly £1.3 billion. This contributes significantly to regional GDP (over 2%).
- Universities employed over 15,000 employees in 2003-4 and their activities gave rise to an estimated additional 11,550 full time equivalent jobs elsewhere in the regional economy. This represents approximately 2% of total regional employment.
- Small number of relatively diverse universities in a small UK region with a strong identity facilitates a wide range of institutional partnerships with regional stakeholders.
- Strongly shared vision and commitment by all regional universities to regional development as represented by their missions and in their Corporate Plans.
- Long history of collaboration between NE universities as exemplified by existence of HESIN/Unis4ne which is an established, well networked regional association with experience of working with regional stakeholders and a record of successful collaborative activities including securing funds and managing projects.
- Increased investment by Government in HE nationally benefits the regions.
- Centralised funding regime seen as most favourable for region's universities rather than a regionally devolved system
- Government set PSA targets for Departments to reduce regional economic disparities and promote social equity important for NE and its universities.
- Treasury interest in and prioritisation of science, innovation, higher level skills and entrepreneurship agendas all useful to universities.

- Treasury/DTI/DfES/HEFCE support for development of third leg activity as described in the Lambert Review and introduction of HEROBC/HEIF funding helping to foster HEI/business/community related activities in the region.
- Successful accessing of considerable EU Structural Funds has helped establish NE universities' regional infrastructure and fund training, business growth, job creation and community development activities.
- Establishment of ONE, the Regional Development Agency in 1999 which uniquely recognised major contribution HE could make to the delivery of the Regional Economic Strategy (RES). 'Universities at the Heart of the Region'. HE plays key role in the Strategy for Success, the region's science and innovation strategy, and successfully accesses funding for a range of activities from the regional 'Single Pot'. RDA support for HE activities integrated across a wide range of themes in new draft RES (2005-8).
- All universities well integrated into their local and sub regional partnerships and actively contributing to the delivery of local strategic development plans and regeneration activities.
- Regional universities net importers of students into the NE, increasing numbers of local students are entering HE, and growth in numbers of international students all building the talent base of the region.
- Successful delivery of widening participation activities including the national Aimhigher programme managed regionally, working closely with NE schools and colleges.
- National requirement for integration of HE into regional skills strategies through the Regional Skills Partnership giving impetus to further partnership working on issues relating to regionally relevant higher level skills
- Comprehensive academic portfolio currently delivered by regions' universities. More detailed work being carried out with RDA/HEFCE on how this could better match to regional higher level skills needs.
- High level of student voluntary activities in local communities.
- Significant areas of world class research (especially science and health) and associated national and international academic networks.
- Success of Knowledge House, the regional universities' business consultancy service, as exemplified by significant increased activity and acknowledged in both the Dearing and Lambert Reports.
- Good performance of region's universities in business and community related activities as evidenced by HEFCE HEBI study (2004).

- More graduates being retained in the region supporting a higher skilled more productive labour force.
- The designation of Newcastle as a ‘Science City’ giving new opportunities to ‘scale up’ science provision in the region.
- All the universities are entrepreneurial places evidenced by growth of graduate enterprise and self-employment activities well supported by the wider business community, leading to increased business start-up and growth.
- Strong, high quality public services in the region with growing demand for graduate employees fosters excellent HE partnership working.
- Well established and high quality medical and healthcare educational provision in all universities working closely with local health authorities and trusts to improve health and wellbeing of the population.
- Strength of culture-led regeneration has successfully fostered close working of HE with cultural agencies and creative/cultural industries.
- Strong collaborative networks between universities’ sports activities, sports clubs (including football clubs), schools, colleges, and local/regional sports agencies working together to improve sports performance, attract talented athletes to the NE and potentially contribute to the UK Olympic Games.
- All universities help create and support a more international and culturally diverse social environment in the North East, own significant cultural facilities and manage major international conferences and events.
- Massive financial investment in campuses of all the region’s universities which is delivering physical regeneration of city centre and riverside sites, mixed use regeneration (eg cultural quarters) and major commercial and business premises.
- Small, but significant growth in numbers of key individuals in the region willing to act as intermediaries, ambassadors, and direct investors in the universities.



## Weaknesses

- Government investment in HE relatively low in comparison with other OECD countries.
- Lack of formal commitment by DFES to specifically address regional economic and social disparities.
- Geographical peripherality of NE combined with large intra-regional economic and social disparities (eg N/S, urban/rural) and the dominance of Tyneside results in feelings of political and social exclusion and makes for more difficult partnership working across the region including for HEIs. New emerging dimension of the City Region adding complexity to the spatial system.
- Some HEFCE policies not supportive of regional collaboration and development e.g. RAE reinforcing research concentration in the South East, lack of incentives for RAE collaboration including in regions, low levels of funding through HEIF for business-university activities, and lack of incentives for regional HE collaboration in most special initiatives.
- No history of significant private sector investment in universities in NE (cf Leeds and Manchester). Structure of regional business/industry (e.g. few large international companies, low number of company HQs, predominance of SMEs, decline of manufacturing, little R&D, low demand for higher level skills) hinders quality/quantity of HE partnership work with regional private sector.
- Much funding for regional activity short term, politically driven and difficult to sustain. Match funding regimes favour the well off.
- Bureaucratic management burden of EU Structural Funds hinders/deters involvement.
- End of EU Structural Funds in 2008 will affect universities' ability to work in areas of regional market failure. This includes loss of funding for regional infrastructure, removal of subsidies for externally facing university business units, reduction in non-profitable work with business especially SMEs and ending of many regionally relevant education programmes supporting higher level skills development and job creation.
- Lack of recognition of the NE universities as a significant business sector composed of strong diverse institutions by some regional stakeholders.
- Universities seen historically as showing lack of visible commitment to region, poor communication with regional stakeholders. Cultural differences and lack of understanding about HE business drivers affected quality of relationships.
- Universities seen by region as primarily driven by their own institutional interests which may or may not be aligned to those of the region and that this may also result in negatively perceived competitive behaviour.

- Difficulty of Unis4ne to give a common voice for the universities on some issues as a result of diverse institutional interests.
- A small vocal minority of regional organisations especially in the SME sector, criticise the behaviour of the region's universities claiming they are too powerful, greedy for regional resources at the expense of others, self interested, elitist, arrogant, act as unfair competition, are difficult to access and do business with.
- Relative failure of the region to capitalise on the universities' national and international contacts and networks including alumni, and the universities' failure to communicate these opportunities to the wider region.
- Poor regional educational performance and high drop-out rate at 16 affects higher education participation rates of young people in the region, the lowest in the country at 24%.
- History of adult educational underperformance leads to need for significant investment in basic skills to Level 2 with less investment at Level 3, and affects adults' capacity to engage in HE including CPD and work-based learning.
- Different funding models for HE and FE makes working together more difficult. Complexity of managing the interface between universities and FE colleges delivering HE.
- Students' relative lack of interest in studying some subjects relevant to the region's economic/manufacturing base.
- HEFCE's teaching funding formula (now under review) is unhelpful in supporting more flexible, PT, CPD and work-based learning most of which is regionally focused.
- Failure of DfES nationally to positively engage HE from the start with the emerging skills agenda, the SSDA/SSCs, and the new RDA managed Regional Skills Partnerships, their plans and investment strategies. Relative lack of senior management buy-in for this agenda as a result of current HE funding model. Lack of skills development infrastructure in universities comparable to technology transfer offices, to coordinate activity.
- Lack of Government research institutes / non HEI government funded research in NE to work with regional universities.
- High level of university commitment to the RAE leads to a perception among the academic community that applied or regionally relevant research and consultancy is less desirable than more academically oriented research.
- Universities seen as having slow and difficult decision-making processes, especially by private sector. Lack of wider understanding of public accountability and risk management issues for HE.

- Difficulty in negotiating intellectual property issues.
- Lack of significant private sector venture capital in the region.
- Difficulty of engaging with business support agencies who have been constantly restructured, slow to recognise HE's contribution and sometimes see HE as a rival in their work.
- Relatively few spin-out companies from universities.
- The RDA establishment of intermediary organisations (5 Centres of Excellence) hindered universities' ability to engage speedily with its Strategy for Success and the NE science and innovation agenda. The Science and Industry Council was slow to function effectively.
- Academic careers still largely structured around contribution to research and teaching rather than wider regional contribution, though this is changing according to institutional mission.
- Unrealistic expectations and the wide range of disparate activities relating to regional engagement present a management challenge to the universities. Institutions have a differential resource base and capacity to manage this.
- Geographic concentration of students in certain areas can be the cause of tensions with local communities creating negative perceptions about the universities.
- Fractured nature of community and voluntary sector makes engagement difficult.

## Opportunities

- Work more systematically to involve national government with the NE universities and other regional stakeholders. Proactively raise the profile and take forward the HE and regional development policy agenda in ways that will improve the NE.
- In particular collaborate more closely with DfES, HEFCE, HESA, RDA, Government Office NE together with the almost unique concentration of, high level academic experts on regional development in the NE universities, to provide an improved understanding of regional issues. Capitalise on the expressed commitment of all to improve regional intelligence, and provide a better evidence base for the regional work.
- The strong national Government agenda around the development of the knowledge economy gives opportunities for additional funding for higher education. Work to improve understanding in the wider regional community of what is meant by a “knowledge economy” and its importance/relevance to economic development in the NE.
- Build on HEFCE interest in regional impact and contribution as evidenced by support for this study, the appointment of regional consultants who can advise on policy issues and help build HE capacity with other regional stakeholders, financial support for Higher Education Regional Associations, use of Strategic Development Funds for joint investments with universities/RDAs/other partners, and some initiatives with a regional dimension (e.g. Additional Student Numbers).
- Opportunity to capitalise on the widely expressed view that regional relationships have markedly improved creating greater optimism, mutual understanding and new opportunities for partnership working. Continue to cultivate a culture of mutual respect, appreciation of the diversity of business drivers for different stakeholder organisations alongside widespread recognition of common regional purpose.
- Build on improved working relationships by aligning corporate missions across regional stakeholders, cross referencing objectives and activities and devising win-win strategies.
- Capitalise on Unis4ne, a mature and highly respected regional association, to help articulate the collective HE voice in the region, to further engage regional and national stakeholders in the regional HE agenda and vice versa, and help grow the market for HE.
- Actively implement the new agreed protocols for managing the universities’ relationship with the RDA, focus on joint working to deliver mutually agreed objectives in the new RES both individually and collectively.
- Take advantage of the considerably improved relationship with local government as reported by all partners, review local and regional local government partnership arrangements and share best practice in joint project development/delivery.
- Review partnership relationships with new, emerging regional organisations eg new regional health authority, Learning and Skills Council, and potentially a new region

wide business support service. Build on best practice as demonstrated by the regional arts and sports communities.

- Continue to participate actively in The Northern Way, opening up possibilities for very significant research collaboration across the northern universities (the N8 project could be equal to the South East Golden Triangle), the development of high level regionally relevant research, increased Knowledge Transfer Partnership activity and teaching programmes (Centres of Professional Excellence) through new funding opportunities.
- Build on outcomes already achieved through collaboration in the Strategy for Success and collectively work to enhance both university and business innovation in sectors/clusters identified as critical to the region's development. Investigate together the most appropriate models for delivery.
- Increase national and international research networks to build research reputation, develop strategies to deliver research critical mass in the region, sustain and grow research capacity in the new universities through collaboration. Lobby Government/HEFCE to incentivise collaboration in the RAE including regional research collaboration with partners relevant to the regional interest.
- Ensure Newcastle Medical School becomes one of the five national University Centres for NHS Research.
- Further develop already improved collaborative relationships between Knowledge House, business support agencies and the wider business community as exemplified by joint appointments, Ahead for Business seminars and increased collaborative activity and partnership working.
- Attract students and staff from an international stage on the back of the NE's improving business and cultural image
- Help increase inward investment into the region by stressing the attractiveness of the universities' expertise and their national and international academic and business networks to the external business community.
- Take advantage of the development of new sources of venture capital eg NStar to aid commercialisation.
- Jointly work to source sustainable future funding streams for graduate enterprise, hatchery, incubator and science/business park activity much of which is currently dependent on EU funding.
- Persuade Government / HEFCE to increase HEIF funding to levels recommended by the Lambert Report (£150m per annum) and financially incentivise cross university/business/community engagement in the region making step changes in levels of activity.

- Take greater advantage of the small but significant private sector business and professional services sector which acts as an important intermediary between universities and the wider business community.
- Implement the DfES requirement for higher education to be integrated into Regional Skills Partnerships and work closely with SSDA/SSCs giving an impetus to activities which drive up employer aspirations and the more effective use of graduates by the region's business community.
- Build on the successful working relationships with FE and schools established through sub regional HE/FE/schools partnerships and Aimhigher. Successfully deliver the new regional Lifelong Learning Network in the NE increasing HE participation rates towards the 50% target. Work closely with Aspire, the business community's schools career aspirations programme.
- Establish a higher education forum at regional level that includes both the universities and colleges of FE that deliver HE programmes to help overcome difficulties which result from different national funding regimes for HE and FE, different associational structures (AoC is a national organisation with a regional office, Unis4ne is regional), FE networks which are primarily operating at sub-regional level, and the dominance of the universities in partnership arrangements.
- Work together to more closely align teaching and learning activity ensuring higher level skills provision appropriate to regional employment needs including increasing numbers of Foundation Degrees, work-based learning programmes, ICT and e-learning, improve employer engagement.
- Build regional academic collaborative networks of excellence in teaching and learning as exemplified by the success of the nationally designated Health and Music Centres of Excellence in Teaching and Learning (CETLs) which work closely with related regional organisations. Replicate these in other subject areas.
- Continue to be a major importer of students into the region by aligning university marketing strategies alongside the RDA which markets the region.
- Develop partnership working with the community and voluntary sectors on the back of newly emerging activity at regional level of this sector and growing recognition of its importance in delivering economic and social development in the NE.
- Persuade DCMS, DTI and DfES to 'join up' national Government thinking on how to better support both the universities' active engagement in culture-led regeneration and with the creative/cultural industries as exemplified in the NE.
- Further mainstream the regional engagement of the academic community through staff development (e.g. CuPiD programme), career recognition, financial incentives and other reward mechanisms.
- Encourage arrangements involving staff representation in a range of regional organisations, participation in regional public affairs and regionally relevant research

organisations (e.g. the NE Academic Panel, Social Futures Institute, Wolfson Institute, Centre for Public Policy Research and CURDS).

## Threats

- The Government interest in regions declines.
- Government belief that additional fee income will further build university capacity proves illusory.
- National employer/business led strategies by Government for HE favours successful regions and results in increasing regional disparities.
- The NE fails to improve economically and socially, regional disparities grow and the regional HE business environment deteriorates.
- Failure of the NE RDA and universities to engage effectively together in the Northern Way leads to potentially stronger NW and Yorkshire RDA/HE alliances resulting in further marginalisation of the region and its universities.
- Regional Government in Scotland with strong support for universities, investment in research collaboration to achieve critical mass, different fee regimes may impact on NE region.
- Further fragmentation of the HE sector occurs nationally, is replicated in the region and has consequences for the effectiveness of Unis4ne.
- Strengthening of the market in higher education combined with few funding incentives to support regional collaboration result in increased institutional competition and less regional engagement.
- The introduction of the new fee regime produces a decline in numbers of students entering higher education and reduces student migration into the region. Results in fierce competition for the declining local market and potential financial destabilisation.
- Failure of the international student market (e.g. a result of high fees, increased international competition, countries building their home HE market, difficulty in visas, fear of terrorism), produces financial destabilisation.
- Financial pressures result in the scaling back of non-viable academic programmes reducing regional menu of provision.
- Failure to attract and retain top quality staff.
- Student debt and the end of ESF funding decimates postgraduate research and taught course provision in the North East reducing the opportunity to develop the highest level skills within the region.
- Student subject choice does not coincide with NE labour market needs.



- Full economic costing, the end of EU funding and universities ceasing to be able to deliver a strong regional dimension to their work results in the decline of collaborative university-business activities in the North East including Knowledge House.
- Centres of Excellence/Pillars strategy of RDA fails to deliver and other regions/nations prove stronger in these same areas of activity.
- Relatively poor performance by the region's universities in the RAE because of lack of critical mass, research staff/team poaching by HEIs in stronger regions, differential investment in universities' research by RDAs. Results in loss of investment in research capacity and consequent commercialisation opportunities in the universities and region.
- Threat of further concentration of QR in golden triangle resulting in reduction in core funding in the NE - this is despite good performance in the RAE
- Phasing back of Aimhigher results in loss of capacity and momentum in widening participation activities. Schools absorb standards funds, universities scale back activity due to lack of funding and the local student market declines.
- The employer driven agenda of the SSDA/SSCs fails to raise aspirations in the regional/business community for higher level skills and graduates leave the region due to lack of employment opportunities in higher numbers exacerbating the North East's low skills, low productivity economy.
- Lack of funding and increased student debt become major inhibitors to graduate enterprise, self-employment, and business start-up activities.
- The development of large university projects often involving major physical development and requiring close working relationships with other co-funding partners proves slow, complex and difficult to deliver.

# NE ENGLAND OECD REPORT

## ACRONYMS

ADC	Academic Development Committee (of Unis4Ne)
ADL	Arthur D Little (Report)
AMAP	Institute for Automotive & Manufacturing Best Practice
APEX	Accreditation for Pathways of Excellence
BIPV	Building Integrated Photovoltaics
BP	British Petroleum
BTG	British Technology Group
BUSA	British Universities Sports Association
CAMM	Centre for Achievement in Manufacturing and Management
CBI	Confederation of British Industries
CCPM	Centre for Culture Policy & Management
CELS	Centre of Excellence for Life Sciences
CENAMPS	Centre of Excellence for Nanotechnology, Photonics & Microsystems
CETL	Centre of Excellence in Teaching and Learning
CfAI	Centre for Advanced Instrumentation
CIP	Collaborative Innovation Partnership
CIQ	The creative industries quarter
CIRA	Community Informatics Research Applications Unit
CKE	Centre for Knowledge Exchange
CLEMANCE	The Clean Environment Management Centre
CMI	Commercialisation of Medical Innovations
CMI	Cambridge – MIT Institute
COVE	Centre of Vocational Excellence
CPD	Continuing professional development
CPI	The Chemical & Process Industries

CRE	Centre for Rural Economy
CURDS	Centre for Urban and Regional Development Studies
CVP	Community Volunteers Project (Teesside)
DCMS	Department of Culture Media & Sport
DfES	Department for Education & Skills
DoH	Department of Health
DTI	Department of Trade & Industry
ENRUST	An Enterprise Agency based in Newcastle
EPICC	European Process Industries Competitiveness Centre
ERDF	European Regional Development Fund
ESF	European Structural Fund
ESF	European Social Fund
EU	European Union
FDs	Foundation Degrees
FE	Further education
FSB	Federation of Small Businesses
FTEs	Full time (higher) education students
GCE	General Certificate of Education
GCSE	General Certificate of Secondary Education
GONE	Government Office North East
GPD	Gross domestic product
GRASP	Graduate retention in the automotive sector
GVA	Gross Value Added
HE	Higher Education
HEFCE	Higher Education Funding Council
HEIF	Higher Education Innovation Fund
HEIs	Higher Education Institutes

HERA	Higher Education Regional Association
HEROBIC	Higher Education Reach out to Business & the Community Fund (Predecessor of HEIF)
HESIN	Higher Education Support for Industries in the North
HND	Higher National Diploma
IADET	Institute for Agility & Digital Enterprise Technology
ICfL	International Centre for Life
ICI	Imperial Chemical Industries
ICT	Information Communication Technology
IDI	Institute for Digital Innovation
ILOs	Industrial Liaison Officers
IP	Intellectual Property
IPR	Intellectual property rights
IRES	Institute for Research on Environment & Sustainability
ISRU	Industrial Statistics Research Unit
KH	Knowledge House
KPIs	Key performance indicators
KTP	Knowledge Transfer Partnership (previously TCS)
LEA	Local Education Authority
LFS	The Labour Force Survey
LLN	(NE) Lifelong Learning Network
LSC	Learning & Skills Council
MIT	Mass. Institute of Technology
MRC	Medical Research Council
NaREC	New & Renewable Energy Centre
NCIHE	National Commission of Inquiry into Higher Education
NCN	National Competitiveness Network
NCSL	National College for School Leadership

NDC	Northern Development Company
NE	North East (England)
NECESI	NE Centre for Environmental Science & Industry
NECSE	NE Centre for Scientific Enterprise
NEPA	NE Productivity Alliance
Net Park	NE Technology Park (Durham)
NEXUS	The Transport Passenger Authority in Tyne & Wear
NGI	Newcastle Gateshead Initiative
NGO	Non-governmental organisation/body
NHS	National Health Service
NLP	Negotiated Learning Programme
NMUK	Nissan Motors UK
NNPA	Northumberland National Park Authority
NPAC	Northumbria Photovoltaics Applications Centre
NRDC	National Research & Development Corporation
NRF	Northern Regional Fund
NStar	Exploration agency for the 5 centres of excellence
NTI	New Technology Institutes
NW	North West (England)
ODPM	Office of the Deputy Prime Minister
OFFA	Office of Fair Access
ONE	The RDA in the North East
OUIIN	Open University in the NE
PIU	Performance & Innovation Unit
PRAXIS	CMI training programme for University staff on technology transfer
PSA	Public Service Agreement
PT	Part time

PV	Photovoltaics
PVCs	Pro Vice Chancellors
PWC	PricewaterhouseCoopers LLP
QAA	Quality Assurance Assessment (for teaching in HE)
QR	Quality research funding
R&D	Research & development
RAE	Research Assessment Exercise
RAGS	Regional Advisory Groups
RCID	(Regional) (Resource) Centre for Innovation & Design
RDA	Regional Development Agency
REDSS	Research & Economic Development Support Service (Durham)
REO	Regional & European Office
RES	Regional Economic Strategy set by ONE
RSP	Regional Skills Partnership
RSPB	Royal Society for the Protection of Birds
RTCs	Regional Technology Centres
SCAN	Student Community Action Newcastle
SCRI	Sustainable Cities Research Institute
SEC	Science Enterprise Challenge
SERC	Science & Engineering Research Council
SfS	Strategy for Success – part of ONE’s first RES establishing 5 Centres of Excellence
SME	Small & medium enterprise
SMT	Senior management team of a University
SOFI	Social Futures Institute
SRB	Sub-regional single programme
SSC	Sector Skills Council
SSDA	Sector Skills Development Agency

STARS	Student Targeted Aspiration Raising Scheme
STEP	Shell Technology Enterprise Programme
TCS	Teaching Company Scheme (later KTP)
TDC	Teesside Development Corporation
THES	Times Higher Education Supplement
TQA	Teaching Quality Assurance
TWEBLO	Tyne & Wear Education Business Link Organisation
UCAS	University Clearing Application System
UCF	University Challenge Fund
UCS	University College Stockton (Durham)
UDSC	University of Durham Stockton Campus
UGC	University Grants Committee
UIC	University innovation centre
UK	United Kingdom
Unis4ne	Association of universities in the North East
VAN	Volunteering at Northumbria
WRI	Wolfson Research Institute

## **CHAPTER I: OVERVIEW OF THE REGION**

### ***The nature of the region and the regional stakeholders***

#### **The economic, social and cultural background of the region**

The North East of England is the smallest of the English regions in both area (8,592 sq km) and population (2.5 million). The region comprises two county councils, covering the largely rural sub-regions of Durham and Northumberland, whilst the majority of the urban areas is covered by ten unitary authorities. Previously the region also encompassed Cumbria in the west, but this was re-allocated to the North West region when new boundaries were agreed for new government offices in the early 1990s.

It is a region of contrasts: extensive rural areas yet with major urban concentrations along the river corridors of the Tyne, Wear and Tees. Approximately 70% of the population reside in the riverside conurbations that developed to serve the traditional industries of the North East—mining, shipbuilding, steel and heavy manufacturing. These industries have now largely vanished and regeneration is increasingly focused on services. By contrast Northumberland contains some of the most sparsely populated rural areas in England.

The region is relatively remote from other urban centres within the UK and is more self-contained than other English regions. Newcastle is 100-120 miles distant from the next nearest major cities: Edinburgh to the north and Leeds to the south. As the most peripheral of English regions and with the clearest physical boundaries – separated from other adjacent regions by areas of sparsely populated uplands, the region has a strong sense of regional identity and sense of a distinctive history and culture. This has been intensified perhaps in recent years by a sense of pride over the development of new cultural resources and diversification of the regional economy. The sense of peripherality is also strengthened by the status of Scotland to the north: with its own Parliament and a separate education system there are restrictions on the possibility for integrated activity between the two regions, with implications for the flows of students and other areas of university policy.

#### **Broad population trends over the last ten years**

The North East has the smallest population of the English regions at just over 2.5 million at the last census. Population has fallen slightly in recent decades as the region has underperformed in economic terms and there has been net out-migration, often of the most skilled. In the decade up to 2001 the regional population fell by 2.8% compared with an increase of 2.5% in England and Wales.

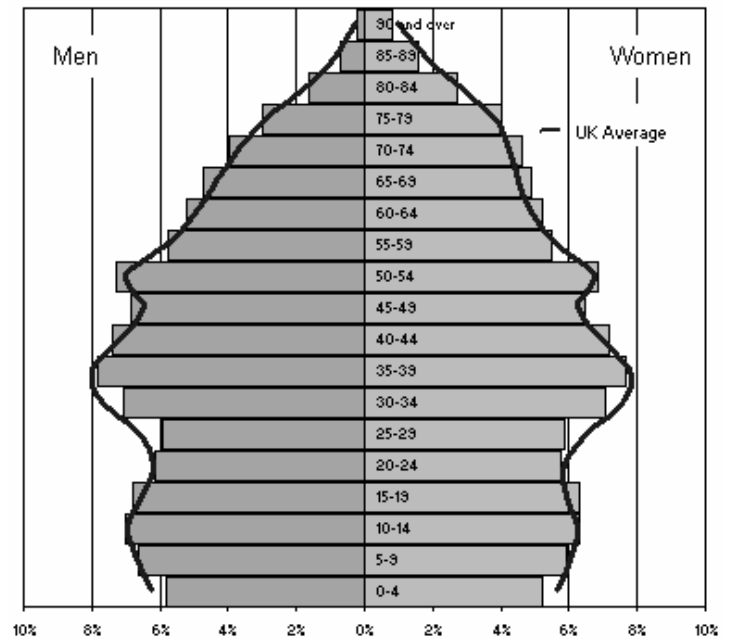
The overall decline in population also has a marked internal geography within the region, with growth in those districts comprising market towns within commuting range of the conurbations, and steep decline in some of the most urbanised areas of the region. Considerable effort is now being placed on the need to revitalise some of the urban centres and stabilise population levels, and recent evidence suggests growth in population again in Newcastle which had experienced some of the larger declines.



Figure 1.1: The North East of England



Figure 1.2: Age pyramid for the North east compared with the UK average (2001 census)



The structure of population in the region reflects these trends, broadly following the national pattern, but with higher proportions of people in the age groups over 50 and a lower share of population in the 25-35 age bracket. At a local level the age pyramids show a high concentration of young adults in the main cities where the universities are concentrated.

The region has a very low share of population from ethnic minorities with 97.6% of the population identifying themselves as white in the 2001 census compared with 91.1% in England and Wales. Only 2.0% were born outside of the EU and only 0.9% elsewhere in the EU, again compared with nearly 9% of those elsewhere in England and Wales born outside of the UK. Relatively low demand for labour and high unemployment during recent decades have limited in-migration relative to other regions.

Occupational structure and educational attainment have also been affected by the historic structure of industry and the poor economic performance of the region during the post-war period. An economy rooted in traditional manual work, followed by a focus on manufacturing, and with low levels of high order services has led to a workforce that is more oriented to manual and lower level skills than the UK as a whole. Thus the stock of skills in the region is weaker at the higher, and degree, levels, partly due to historic low participation in higher education, and partly due to a trend for the migration of the higher qualified out of the region. As a result the region has the lowest level of degree qualified people of working age, at just over two thirds of the national level (and participation rates in higher education from the local population are half that of the leading UK regions). Correspondingly, the region has a higher proportion of the workforce whose highest qualifications are at the GCSE level, and a higher proportion with no qualifications.

Table 1.1: Population of working age<sup>1</sup>: by highest qualification,<sup>2</sup> winter 2003

	Percentages and thousands	
	North East	United Kingdom
Degree or equivalent	12.3	17.1
Higher education below degree	8.5	8.6
GCE A level or equivalent	23.7	24.1
GCSE grades A*-C or equivalent	24.8	21.9
Other qualifications	14.0	13.2
No qualifications	16.3	14.4
All people of working age <sup>3</sup> (thousands = 100%)	1,526	36,239

1 Males aged 16 to 64 and females aged 16 to 59.

2 For information on equivalent level qualifications, see Notes and Definitions.

3 Population in private households, students in halls of residence and those in NHS accommodation. Total includes those who did not state their qualifications, but percentages are based on figures excluding them.

Source: Department for Education and Skills, from the Labour Force Survey (Office for National Statistics)

Other indicators on which the region performs poorly are in terms of health. The region regularly tops lists of highest mortality and morbidity for a wide range of illnesses, and this also connects with high levels of worklessness due to invalidity. In parts of the region around 20% of the male workforce is registered as unable to work due to ill-health.

## The main economic and labour market trends over the last ten years

The region has long had a low level of gross value added compared with the national average, and growth in recent years has lagged behind the national level, the two principal exceptions to this being Tyneside and Darlington which have begun to catch up with the national level to some degree whilst Northumberland and Teesside in particular have lagged badly.

Table 1.2: Headline<sup>1</sup> gross value added (GVA)<sup>2</sup> per head by NUTS3 area at current basic prices 1995 to 2002

	1995	1996	1997	1998	1999	2000	2001	2002
<b>UNITED KINGDOM<sup>3</sup></b>	11015	11683	12339	13023	13583	14239	14906	15614
<b>England</b>	10953	11591	12313	13085	13641	14185	14889	15633
<b>North East</b>	9015	9397	9834	10238	10571	10974	11530	12078

Source: National Statistics [http://www.statistics.gov.uk/downloads/theme\\_economy/NUTS3\\_Tables\\_1-12.xls](http://www.statistics.gov.uk/downloads/theme_economy/NUTS3_Tables_1-12.xls)

<sup>1</sup> The headline GVA series for this publication have been calculated using a five-period moving average.

<sup>2</sup> Estimates of workplace based GVA allocate income to the region in which commuters work.

The region has experienced long term sectoral change with three main components

- First there has been the national shift away from primary and some traditional manufacturing sectors towards services
- Second has been a particularly sharp decline in primary and some manufacturing sectors in the North East due to the previous dependency on coal and steel, as a consequence of resource exhaustion in parts and a lack of competitiveness faced with overseas low cost production.

- Third has been region-specific rises and falls in particular sectors according to the ebb and flow of investment and region-specific cluster economies.

During the 1990s employment in the region has risen steadily back towards 1970s levels, reaching one million again in 2002, however there has been a distinctive sectoral trend to this change which reveals a dependence on national growth and a weakness in the capacity to generate endogenous growth.

The period of regional assistance has had little effect on the creation of long term endogenous capacity for growth in the region. Most manufacturing sectors have declined, including those such as electronics which have been major beneficiaries of inward investment and regional selective assistance. The North East has been a beneficiary of considerable foreign direct investment but the scale of investment has fallen since 2001 and some existing investors have withdrawn and redirected investment to other countries, notably in Central and Eastern Europe. There have been a few long-term successes from regional policy, with the auto industry being perhaps the most significant, albeit with an over dependence on the future investment decisions of one firm, amidst recurring fears of withdrawal. Many of the traditional engineering sectors have also suffered as a consequence of liberalisation of public procurement, privatisation and subsequent rationalisation (notably power engineering and gas-supply engineering, and defence). There are small pockets of successful technology-based firms, yet the region is very much under-supplied with high growth high tech firms.

On the other hand employment has been growing as a result of job creation in services, but the main growth has been in consumer-based and public sector services, not significantly in business services. Productivity in business services is also well under the national average. What we have seen are the effects of national macro-economic growth feeding through into the consumer sector in the region, coupled with state investment. In many respects the region is becoming more dependent on spillover effects from the South East of England and less able to pursue an endogenous growth strategy.

Despite being a small region, the North East claimed a high share of national levels of investment in manufacturing by overseas owned and UK owned companies during the late 1990s. The levels of investment vary considerably by year as a result of the lumpy nature of the larger investments. Although UK-owned investment is greater than foreign owned investment at the national level, the foreign owned component in the North East has been almost as significant as UK-owned, and in 2001 the foreign element accounted for 54% of manufacturing investment in the region.

Comparing the levels of investment in the North East with respective levels for the UK we can see the relative dependence of the region on overseas investment (see annex). UK-owned companies typically invest around 4-5% of their total UK investment in the North East, slightly over the region's share of population but similar to its share of manufacturing activity. This figure does not vary greatly from year to year. By contrast the foreign owned investment varies from around 6% of the national share to over 10%, showing that the region has been highly successful at winning these projects.

Examining the North East position on private and public R&D, we can see that the region is disadvantaged on both (Figure 1.3). On BERD/GDP the much higher lead in East and South East is even stronger than in the public R&D sector. On the latter the North East is one of the lowest performers, but still around half the level of the best (South East and Scotland). What is distinctive about the North East though is the almost complete absence of government R&D outside of the university sector – and consequently the added dependence of the North East on the universities for research.

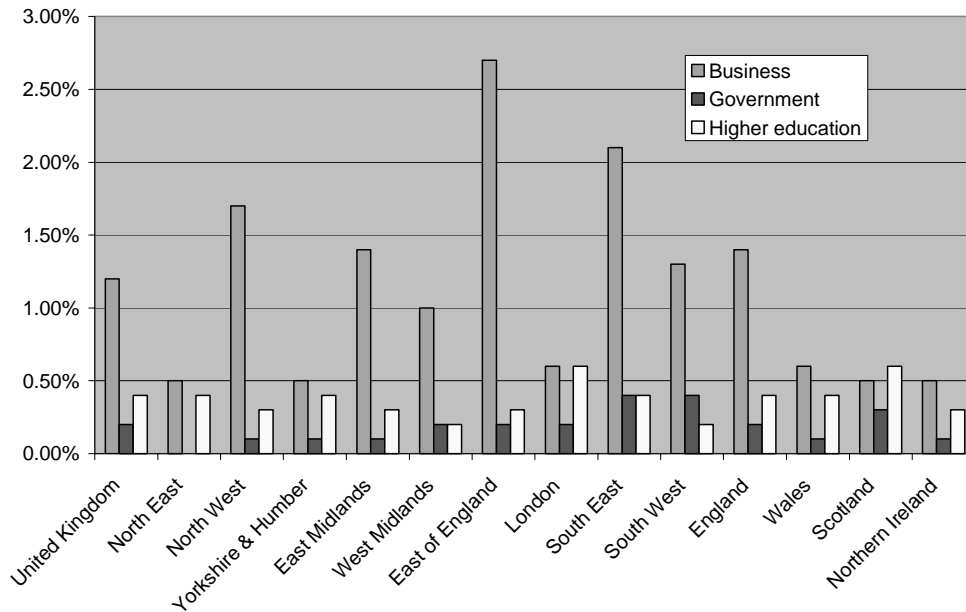


Figure 1.3: UK regional R&D by performing sector 2000

## Strengths and weaknesses of the region

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>High quality of life</li> <li>Low living costs</li> <li>Low congestion</li> <li>Strong HE sector</li> <li>Strong regional identity</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>Low GDP</li> <li>Low levels of R&amp;D activity</li> <li>Weak business services sector</li> <li>Low levels of participation in the workforce</li> <li>Low levels of qualification in the workforce</li> <li>Low participation in HE</li> <li>Poor health</li> <li>High levels of people on invalidity benefit</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>Investment in support for key growth sectors through Strategy for Success</li> <li>Improved image may enable greater inward migration of highly skilled</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>Competition from all other regions for growth industries</li> <li>Competition from Far East and Eastern Europe</li> <li>Future loss of EU regional support</li> <li>Rate of innovation in global markets</li> <li>Migration of highly-skilled from the region if demand is stronger elsewhere</li> </ul>

## ***Characteristics of the regional institutional networks***

The region has a complex institutional structure of government agencies and local authorities with a variety of shared governance bodies.

Established in 1994, **Government Offices for the Regions** (1 in each of the 8 officially designated English regions outside London) are an integral component of English regional governance. Currently funded and staffed by 10 sponsor Departments of State (see Table in annex 1), they are tasked with overall responsibility for the management and delivery of national government programmes at the local and regional level, supporting and facilitating effective linkages between local and regional stakeholders (including voluntary and community groups, private sector organisation and local authorities) and contributing a regional perspective in the design of national policy. Government Offices therefore manage significant spending programmes on behalf of their sponsor departments, including the administration of European funds. They also oversee budgets and contracts delegated to regional organisations, carry out regulatory functions and sponsor Regional Development Agencies. As an umbrella body, Government Offices are a formal attempt to both promote 'cross-departmental' strategy (in contrast to the traditional 'departmental' approach of government) and act as a bridge between regional and national thinking. Overall responsibility and accountability for Government Offices lie with the Office of the Deputy Prime Minister (ODPM).

The core coordinating body for economic development in the region is **One NorthEast (ONE)**, one of the nine English regional development agencies established by the UK government in 1999.

RDAs are non-departmental public bodies, funded by central government and accountable to the ODPM. The agencies are managed by an executive, and steered by a board representing business, local government and other regional interests, appointed by the deputy prime minister.

Their statutory purposes are fivefold as set out in section 4(1) of the Regional Development Agencies Act:

- To further the economic development and the regeneration of its region
- To promote business efficiency, investment and competitiveness in its area
- To promote employment in its area
- To enhance the application and development of skills relevant to employment in its area
- To contribute to the achievement of sustainable development in the United Kingdom where it is relevant to its area to do so.

The new RDAs incorporated existing small regional bodies, such as the Northern Development Company (NDC) in the North East, with other powers and functions transferred from other public bodies, into new more powerful regional bodies. In the North East, ONE, is one of the larger of these bodies, with a high level of resource relative to the local population base due to the perceived greater need within the region. ONE commenced work in 1999, with its initial priorities being to build the new organisation out of a diverse set of constituent elements, and to develop a Regional Economic Strategy according to guidelines set by national government (Benneworth, 2001). The RDA has also been charged with responsibility for implementation of an innovation strategy in the region, now incorporated into the RES.

ONE implements the Regional Economic Strategy through some direct delivery of support to firms, such as in cluster development teams, but otherwise through the distribution of funds to a wide range of regional and sub-regional partners, according to the population base of the sub-regions. Much of this funding (c70% during 2003 but now reducing to 50%) is distributed

through four sub-regional partnerships comprising the local authorities, other government agencies such as the Learning and Skills Council and Small Business Service/Business link, universities, colleges and other local partners. These sub-regional partnerships are based on the four old county council areas, modified slightly as a result of local government reforms.

**Local government** in the region comprises 2 counties (Durham and Northumberland) each of which are then subdivided into Districts with 2 tiers of local government – county councils dealing with strategic matters and district councils focusing on more local services – and 10 unitary districts in the two main city regions where the single tier of local government has a full range of competences. Some level of county-wide collaboration persists in the two urban centres, with for example the five Tyne and Wear districts retaining some county-wide committees and boards from the former county council. Local authorities are key actors in the sub-regional partnerships, and also form a core group on the Regional Assembly.

Established in 1999, **Regional Assemblies** are unelected bodies created by the Regional Development Agency Act 1998 and located in each of the English regions outside London. They operate within the same geographical boundaries as the Government Offices for the Regions and Regional Development Agencies. In most regions, they share administrative structures with the regional local government associations.

They promote the economic, social and environmental well-being of their respective regions and scrutinise the relevant Regional Development Agency, and also operate as the Regional Planning Body for the preparation of Regional Spatial Strategies.

Under guidance issued by the Secretary of State, the membership of each Chamber/Assembly should comprise a maximum of 70% local authority members and no less than 30% drawn from other sectors, including higher and further education, the Confederation of British Industry, the Trades Union Congress, chambers of commerce, the small business sector, parish and town councils, the National Health Service, voluntary organisations, Learning and Skills Councils, regional cultural consortia, rural and environmental groups and other regional stakeholders.

In November 2004 there was a referendum in the North East to assess the level of public support for an elected regional assembly with a limited range of executive powers. The result was strongly negative, and so moves towards an elected assembly have been abandoned, however this has left a confused situation regarding an appropriate scale of strategic policy development and delivery.

Government is currently engaged with organisations and partnerships in the region at multiple levels. The regional scale is still perhaps the most significant, but over the last year government has encouraged a collective approach to strategic economic development involving the three northern RDAs in a programme called the Northern Way. The three RDAs as regional partners have been engaged in the development of a common strategy and joint activities at a pan-regional scale. In addition the Northern Way emphasises the significance of city regions and some elements of this strategy are being developed by city region partnerships (eight in total of which two are in the North East). There are currently a number of debates around the city region level at the moment and appropriate forms of governance, given that these areas typically encompass a number of metropolitan or unitary councils forming the core of the city region along with some parts of the surrounding shire counties. The emergence of a city region perspective is particularly important for the development of regional strategic frameworks such as the regional economic strategy and the regional spatial strategy. Finally there is the level of local authorities and localities within them and concerns to address the entrenched and highly localised problems of specific communities.

## **Expectations of regional stakeholders for HEIs**

Whilst regional stakeholders have expectations of contributions from the universities to regional needs and to the specific development and regeneration programmes of the region,

they have no formal planning responsibilities for, or powers over universities. As such then the universities are not subject to formal objectives or targets set by regional partners, except where they enter into specific projects supported by those regional agencies.

The main priorities set for the region are contained in the Regional Economic Strategy formulated by the RDA, and whilst the universities have sought to be involved in this and are named as key partners, the RES does not contain specific targets to be met by the universities. It is a matter for the universities as independent organisations as to the extent to which they wish to engage with the RES, or with other local development strategies and partners. A university could, if it chose, avoid all contact with regional stakeholders and take no part in regional activities, as long as it continued to meet the national requirements of the Higher Education Funding Council in terms of its teaching and research. As we will see below it is increasingly expected that universities do engage with regional partners, and the Funding Council does provide some incentive for such collaboration, but any targets for such activity tend to be specific to particular funding packages.

## CHAPTER II: CHARACTERISTICS OF THE HIGHER EDUCATION SYSTEM

### **Overview of the national system of higher education**

The UK universities are part of a system of higher and further education in transition. At the time of writing higher education comprises over 100 universities and over 1.5 million students after a period of expansion during the 1990s, with the prospect of further growth over the next few years. Universities are part of a much larger and changing further and higher education system in the UK, which is increasingly being seen as an integrated system, with alliances and mergers between institutions in the different HE/FE sectors.

*Figure 2.1 Overview of UK higher and further education systems*

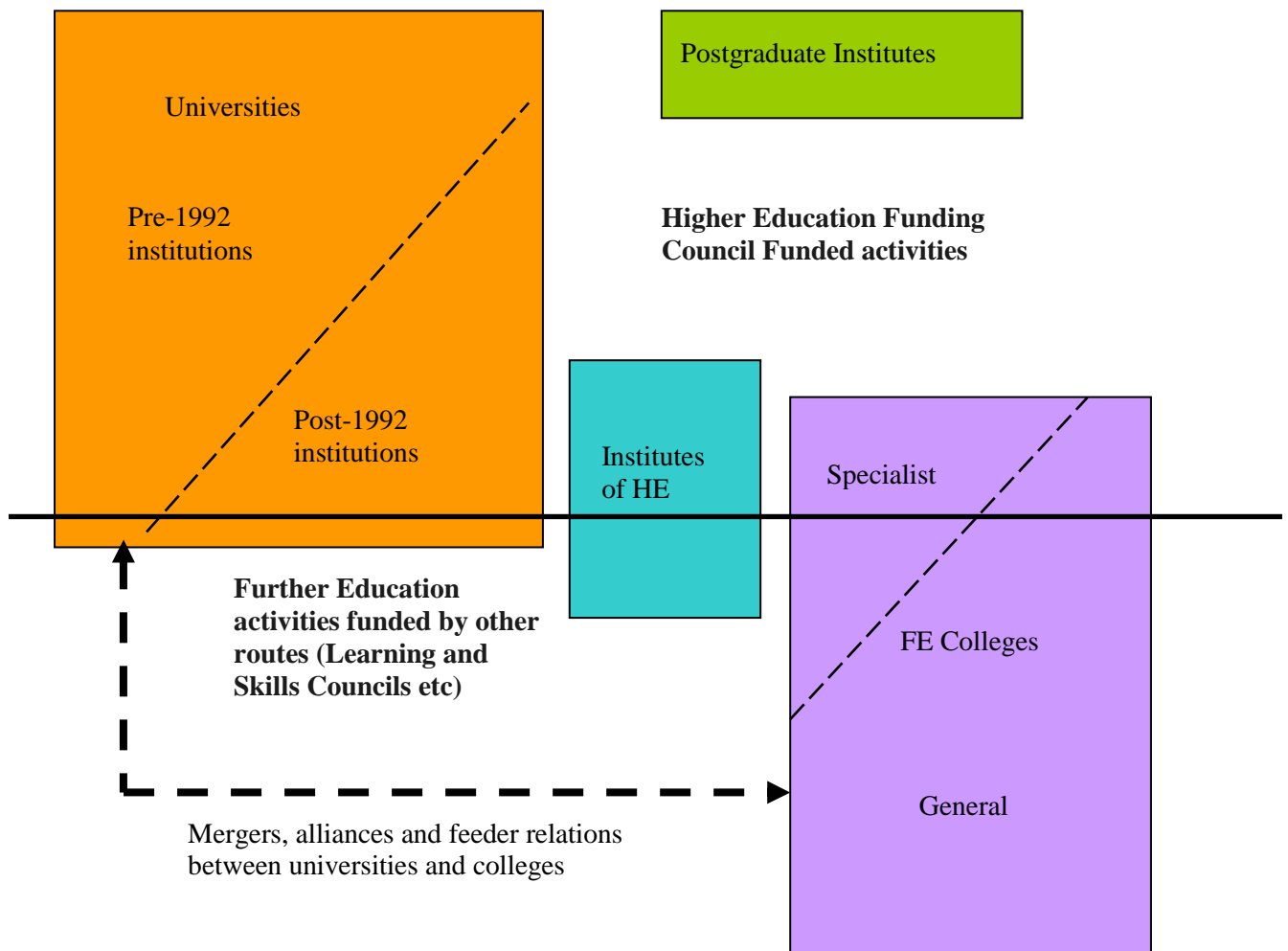




Figure 2.1 above outlines the basic structure of higher and further education in the UK today. Essentially there are two funding streams, one for higher education and one for further education reflected in the horizontal line in the diagram. The higher education sector embraces HE colleges (sometimes referred to as institutes of HE and some of which are currently being redesignated as universities) as well as some elements of the FE colleges.

Universities are diverse, ranging in size, mission, subject mix and history. In England, the older universities were established by Royal Charter or statute. Former polytechnics were given the status of universities under the Further and Higher Education Act 1992. These are sometimes called 'new' or 'post-1992' universities. The existing 'old' universities include many founded in the 1950s and 1960s, alongside the older 'civic' universities and colleges of the University of Wales established in the nineteenth and early twentieth centuries, plus the ancient universities of Oxford and Cambridge dating from the twelfth and thirteenth centuries, and four Scottish universities, dating from the fifteenth and sixteenth centuries.

Universities have their own degree-awarding powers. They range in size from as little as 4,000 students to 30,000 students. The combined schools and colleges of the University of London have over 100,000 students, and the Open University, which teaches largely by part-time distance learning, is even larger. There is one privately funded university - the University of Buckingham, which runs mainly business and management courses.

Public funding for the universities is provided through funding councils which provide funds for teaching and research through a set of funding formulae. The Higher Education Funding Council for England (HEFCE) funded by the Department for Education and Skills was established following the Further and Higher Education Act 1992. A principal feature of the legislation was to create one unified higher education sector by abolishing the division between universities and polytechnics. Four funding bodies were set up - for England, Scotland, Wales and Northern Ireland. From 1 April 1993, these bodies have funded all higher education institutions in the UK.

## **Dearing Inquiry**

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 government grants – and the mission and role of universities were 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:

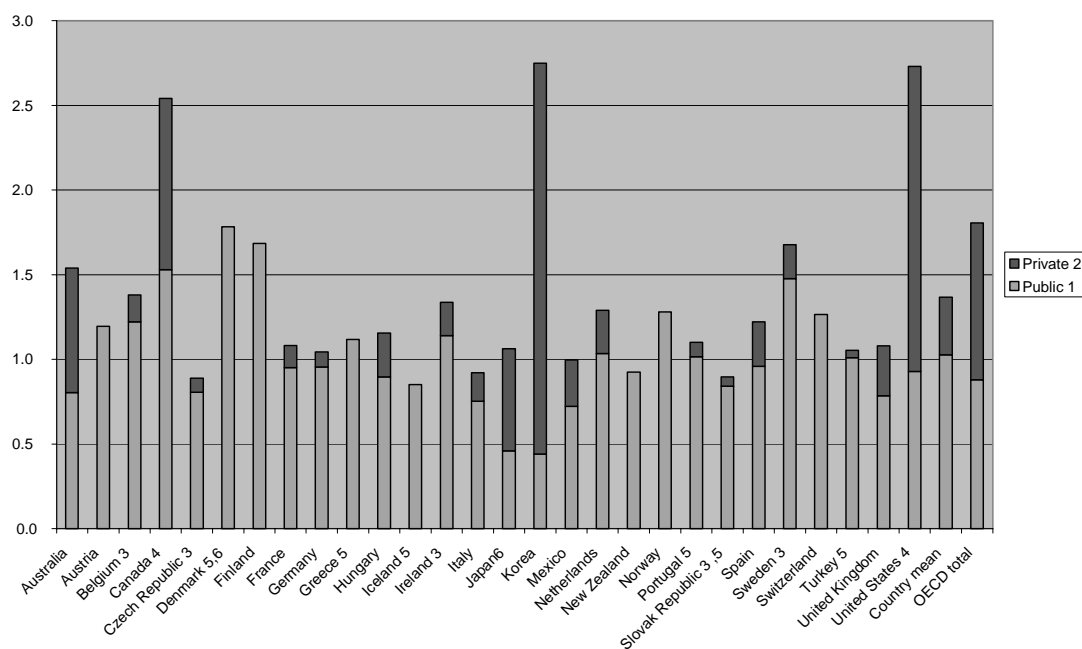
‘To make recommendations on how the purposes, shape, structure, size and funding of higher education, including support for students, should develop to meet the needs of the United Kingdom over the next 20 years, recognising that higher education embraces teaching, learning, scholarship and research.’

The committee delivered its report in July 1997, covering numerous aspects of university and higher education, embracing teaching, research, governance and management, use of ICTs, regional mission and funding. 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. The most controversial move however was the introduction of fees for students.

Despite the introduction of modest fees, initially at £1000 per year per student for all undergraduate degree courses, rising slightly each year, the universities remain relatively underfunded compared with other OECD countries.

The position of the UK in terms of levels of funding in HE can be seen in comparison to other OECD countries. The UK spends 1.1% of GDP on higher education compared with 2.7% in the US and a country mean of 1.4% across the OECD. Although the UK level is comparable with some major EU partners such as France and Germany and higher than Italy, these countries are also seen as experiencing a crisis in HE investment. By contrast the Nordic countries and Netherlands spend a much higher fraction of GDP than the UK.

Figure 2.2: Expenditure on tertiary education as a share of GDP for OCED countries 2001



1. Including public subsidies to households attributable for educational institutions. Including direct expenditure on educational institutions from international sources.
2. Net of public subsidies attributable for educational institutions.
3. Direct expenditure on tertiary-level educational institutions from international sources exceeds 1.5% of all public expenditure. International sources at primary and secondary levels exceed 1.5% in Uruguay.
4. Post-secondary non-tertiary included in tertiary education.
5. Public subsidies to households not included in public expenditure, but in private expenditure.
6. Post-secondary non-tertiary included in both upper secondary and tertiary education. Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

From 2006 a new system of variable fees will be introduced with universities in England being allowed to charge EU undergraduates up to £3000 per year varied by course, although in practice most universities will charge the full amount for all courses. This will introduce some new money into the system although the impact will be reduced as a consequence of the requirement to provide grants and bursaries to students. The effect of differentiated ability to charge full fees and the different levels of bursaries etc will lead to further diversity within the sector.

## The Higher Education Act 2004

Many of the developments prefigured by Dearing have been gradually introduced over the period since 1997, although with continuing concern over problems of funding for the universities and equality of access for students from different social backgrounds. New legislation recently passed through Parliament among other things introduced higher rate fees payable by what might be considered to be a graduate tax, and to provide better financial support for poor students. Some of the implications of these developments, especially the acceptance of variable fees further reinforces the diversity among institutions with a stronger acknowledgement of an elite group of universities, and with a deliberate government policy to facilitate greater international competitiveness of the elite. The 2004 Act also sought to strengthen an emphasis on fair access to HE through the establishment of an Office of Fair Access which reviews the arrangements made by each university to provide student bursaries and other incentives to widening participation out of the additional income gained from student fees.

### Growth in HE numbers over the past 10 years

Numbers of students in the UK have grown steadily over the past ten years, although at a slower rate than in the previous decade when structural changes in the sector led to massive increases. Total numbers of students (full time and part time) grew from 1.7 million in 95/96 to 2.2 million in 03/04, an increase of 30%, and numbers continue to grow at a modest rate. The largest element is in the UK domiciled undergraduates which grew 28% from 95/96 as a result of increased allocations of places by the funding councils. The largest area of growth is in overseas domiciled postgraduates which grew by 90% over the period.

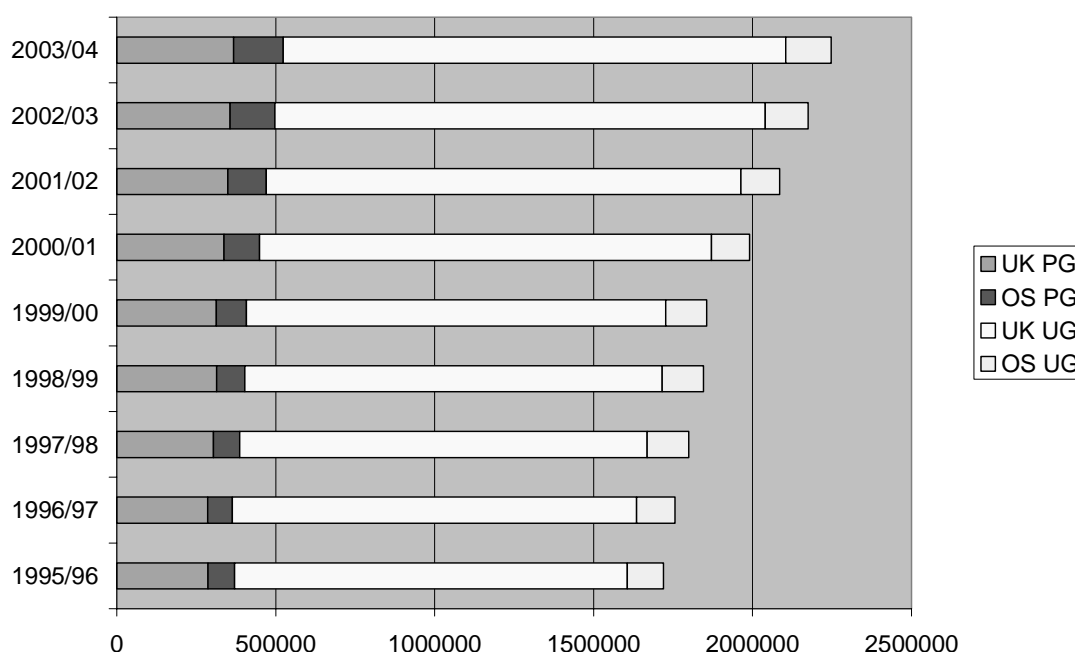


Figure 2.3: Numbers of students (full-time and part-time in UK HEIs)

Source HESA (actual figures in annex)

Student numbers in the North East have also grown during this period, although in the most recent period growth has been slightly slower than the national level. The North East has seen growth from 81,036 students in 1999-2000 to 95,968 in 2004-04, an increase of 18.4% whilst in the same period the national growth was 21% (Further information in chapter 4).

## National analysis of supply and demand of HE ‘product’

The level of demand for undergraduate university places from UK-domiciled students is determined by the numbers of prospective students applying for places, nationally, through the UCAS system. Very detailed information is available on the numbers of students, their socioeconomic origins and their choices of university and degree programme. Numbers have grown steadily in recent years and Government set a target of 50% of 18-30 year olds participating in higher education by 2010, which is steadily coming nearer – currently around 43% participation has been reached. The level of supply of places is regulated by the Higher Education Funding Councils through the allocation of funds for places.

Data from UCAS shows the level of application from the UK for undergraduate places for the last 5 years showing the steady rise in demand from 442,000 to 486,000, and with reports of 499,000 in the current year. Each student can make applications to up to 6 universities. The table also shows the numbers of places accepted, up from around 340,000 to 378,000, and again reportedly rising to around 390,000 for the 2005 intake. Hence the ratio of applicants to places runs consistently at about a ratio of 1.3 (see table in annex).

Overseas and postgraduate places are deregulated and the number of student places is driven by levels of demand. Postgraduate students apply direct to universities.

In England, HEFCE’s strategic Plan for 2003-2008 sets the following objectives and targets for levels of participation in HE.

### Objectives

- To make measurable progress, while maintaining standards, to increase participation in higher education towards 50 per cent of those aged 18 to 30 by the end of the decade, in keeping with the Government’s target.
- To make measurable progress towards widened participation, without increasing student non-completion, while maintaining standards of excellence and recognising and building on institutional strengths and diversity.
- To stimulate new sources of student demand and adjust supply accordingly.
- To improve opportunities for all students through lifelong learning.

### Key performance targets

- To increase participation in higher education in line with the funding and policies set out in the annual grant letter provided by the Secretary of State.
- Across the planning period the non-completion rate for English HEIs will remain the same as, or be less than, the benchmark value calculated from the start year 2002-03.

## Governance and regulatory framework for universities

Higher education institutions are legally independent institutions, established to operate at arms-length from government. Their governing bodies are responsible for ensuring the effective management of the institution and for planning its future development. They are ultimately responsible for all the affairs of the university or college.

Three principles established within the Dearing Inquiry set out the underlying assumptions made by the policy community in the UK:

- ‘institutional autonomy should be respected. Whilst we take it as axiomatic that government will set the policy framework for higher education nationally, we equally take it as axiomatic that the strategic direction and management of individual institutions should be vested wholly in the governance and management structure of autonomous universities and colleges;

- academic freedom within the law should be respected. By this we mean the respect for the disinterested pursuit of knowledge wherever it leads. This too is axiomatic, but needs to be managed responsibly by individual academics and institutions;
- institutional governance should be conducted openly and should be responsive to constituencies internal and external to the institution.’ (NCIHE, 1997)

The Committee of University Chairmen’s guidance for governors states

‘institutions of higher education are legally independent corporate institutions which have a common purpose of providing teaching and undertaking research. The council or board of governors is the executive governing body of the institution and carries responsibility for ensuring the effective management of the institution and for planning its future development. It has ultimate responsibility for all the affairs of the institution’

As the Dearing Report stated,

‘This description of a governing body makes clear that it is the ultimate decision-making body in an institution. These decisions reflect its responsibility for the institution’s strategic direction, reputation, financial wellbeing, the wellbeing of staff and students, and, in association with the Senate or Academic Board, for establishing and maintaining high standards of academic conduct and probity. The governing body should ensure that accountability for implementation is delegated appropriately; that there are suitable fora for stakeholders to express their opinions; and (as we recommend below) that it reviews and reports on progress against the strategic direction. As bodies with public responsibilities, there are also important accountabilities.’ (NCIHE, 1997)

One of the issues arising from the strategic role of governing bodies is their role in ensuring that institutions meet their obligations to their wider constituencies. As such Dearing felt that they should act as a ‘mechanism by which external constituencies can contribute their opinion and advice in a systematic and transparent way’. This then raises the question of who sits on the governing bodies and how they perform as an interface mechanism.

Despite institutional autonomy, government and HEFCE are able to influence the direction of university strategy and drive through policy measures through adjustments to the funding model.

## **Inter-institutional relationships in the UK**

Inter-institutional relations in the UK are highly varied and operate at a number of levels. Whilst institutions compete against each other for students and for research funds, there are many ways in which collaboration has been encouraged. Central to this and discussed in more detail later has been the encouragement by the Funding Council of regional associations of universities, albeit that such collaboration has been in operation in the North East for a much longer period. A number of programmes introduced by the Funding Council in recent years have incorporated opportunities for collaboration through such associations, in developing widening participation programmes, in outreach to business, and most recently in allocating additional student numbers.

On a more longstanding basis there are a large number of formal inter-university mechanisms for collaboration, often at a national level. These include Universities UK as a formal national body to represent universities, a common negotiating body for setting salaries, joint procurement bodies, a national ICT organisation with regional networks, and a variety of advisory and expert groupings on everything from sport to estates planning.

## **The culture of HE in the UK**

The UK university system has a culture which places particular value on research as a source of esteem and recognises a hierarchy of universities by research status. Although it is recognised that universities have several missions – research, teaching, commercialisation, community service, etc – research stands out as the one element of the mission that is increasingly differentially funded, and that differentiation is defined by quality and esteem. So whilst a university that excels in research may receive many times more resource for research than one with a low research profile, there are no additional funds for higher quality teaching and limited opportunity for additional funding for excellence in third strand activities. Consequently it is very difficult to place esteem on quality for anything other than research because this is the key differentiator in funding between universities, and this introduces some constraints on behaviour as will be shown in the next chapter.

UK universities also face certain institutional constraints, although perhaps less than most other university systems because of the relative independence of universities from government – having full control over employment of staff, ownership of property including intellectual property, ability to engage in commercial activities in support of the educational mission, and ability to invest in overseas ventures.

The main constraints are:

- Continuing regulation over fees and quotas for undergraduate students
- Accountability for use of public funds, even if they only make up one third of income, with a requirement to report on all activities whether public funded or not.
- Financial pressures on institutions to ensure that research strategy delivers high RAE scores in order to secure block funding for research under the QR strand of funding.
- A requirement by government that universities demonstrate full overhead recovery on commercial and government department contacts in order to retain higher overhead rates for public research grants.
- Government imposed targets for widening participation, coupled with strict rules on equal opportunities in all aspects of the universities' activities, which introduce tensions between the desire to positively discriminate in admissions in favour of disadvantaged students yet a need to be fair.

## **Dialogue between government ministries concerned with territorial development, science & technology and those sponsoring higher education**

As already noted the government department concerned with higher education policy is the Department for Education and Skills, acting through the HEFCE, although in the devolved territories of Scotland, Wales and Northern Ireland different arrangements are in place. DfES is responsible for all aspects of policy on student numbers and their regulation and interaction between HE and the skills agenda.

National regional policy is driven by a Public Service Agreement (PSA) target set for departments in the Comprehensive Spending Review 2004, which is to 'Make sustainable improvements in the economic performance of all English regions by 2008 and over the long term reduce the persistent gap in growth rates between the regions, demonstrating progress by 2006...'. This target is not formally assigned to DfES surprisingly, but is shared by the Treasury, Department for Trade and Industry, and Office of the Deputy Prime Minister (which has responsibility for local and regional government). Hence whilst DfES policy would seem to be of direct concern to regional development through its effects on skills and

labour markets, DfES has not taken a very active role in addressing territorial issues, and indeed in terms of policy towards HE and the distribution of graduate places has no clear regional policy (although see a later section on the relationship between HEFCE and the RDAs).

DTI has taken a more positive view on the significance of HE for the regions through the innovation agenda, and has argued in a White Paper (jointly with a predecessor of DfES)

*'The role of our universities in the economy is crucial. They are powerful drivers of innovation and change in science and technology, the arts, humanities, design and other creative disciplines. They produce people with knowledge and skills; they generate new knowledge and import it from diverse sources; and they apply knowledge in a range of environments. They are also the seedbed for new industries, products and services and are at the hub of business networks and industrial clusters of the knowledge economy.'* (DTI/DfEE, 2001)

As such DTI has worked with DfES and HEFCE to develop new strands of funding for the commercialisation of university knowledge, as outlined in more detail in chapter 3.

The Office for the Deputy Prime Minister has had a much less important engagement in the role of universities in regions despite being responsible for territorial policy, and local partnerships between universities and regions or local authorities have largely been left for local negotiation with no steering from ODPM.

### ***Regional dimension “inside” the national higher education policy***

In the various phases of expansion of the university system there was an intense consideration of the geography of distribution, not least on the part of the localities that called for new institutions to be created. In the Victorian expansion institutions were created often through the actions of the local business community and local authorities. Later with the massive expansion in the 1960s the Universities Grants Committee (UGC) established a Sub-Committee on New University Institutions to receive regional bids. These submissions were taken into account in the round of designations at that time. In making these decisions concerning new institutions, the Committee reports a number of factors taken into consideration (see annex).

The designation of polytechnics as more vocational centres were more urban in focus than many of the new 60s' universities and in many cases built upon existing urban technical colleges. Leaving aside those in London, which were split between central London and the suburbs, approximately half of the remainder were located in areas with existing universities, such as the big provincial cities, and half formed the only HE provision in secondary cities such as Portsmouth or Sunderland.

Subsequently there have been continuing calls for new universities in areas without HE provision, often more rural in nature, such as Cumbria, the Scottish Highlands and Cornwall. The small city of Lincoln has been perhaps the only significant winner in this by attracting what was Hull Polytechnic and later University of Humberside to establish a new campus in Lincoln, renaming itself the University of Lincoln and Humberside, then gradually withdrawing from Hull and Humberside.

There have been no investments in new institutions within the North East since the formation of the polytechnics in the 1970s, although the decisions to establish these polytechnics in the three industrial centres of the region was influenced by the need to meet the specific training requirements of the region. In particular the formation of Teesside Polytechnic, now University of Teesside responded directly to strategic planning documents published in the 1960s calling for a university presence on Teesside.

Although no new universities have been created in the region apart from the conversion of the polytechnics to universities, there have been several new campuses established in the region which have in part been initiated by regional development considerations at the local scale (a more detailed account of these developments is contained in chapter 5).

## **HEFCE and the regional agenda**

Since 1919 Government funding for HE has come through an intermediary body, currently HEFCE in England. This has protected institutions from detailed interference from Government, though strategic direction is given to HEFCE each year when the Government publishes a letter of guidance that accompanies the grant settlement. Also HE funding is now largely formulaic and based on a system which approximates to measurable outputs and outcomes (e.g. student number, research outputs). The block grant funding from HEFCE is intended to cover a part of the costs of teaching and some costs of research based on quality assessment. There is no regional devolution of this funding or any regional quota, with all funds being allocated to individual universities according to funding formulae. Thus teaching funds are determined by student numbers which are negotiated for individual universities with little consideration to date of regional number in aggregate or for disciplines.

However, whilst universities remain independent institutions, HEFCE can influence their direction in two ways. First, through a financial memorandum which can be very detailed on certain issues (e.g. borrowing money, institutional mergers, widening participation and recovery plans for those in financial difficulty). HEFCE influence on these may well have a regional dimension in terms of impact. Second, HEFCE allocates about 10% of the budget through special initiatives and a regional dimension to their work can be achieved through these (e.g. HEIF).

Two other concerns have been raised about the regional impact of their funding regime. First, some thought that a formulaic centrally imposed funding structure would result in the loss of institutional diversity through “Mission Drift.” As far as the NE is concerned this has not happened and regional institutional distinctiveness has been reserved. If anything the impact of the funding regime has reinforced institutional differences. At the same time, however, it has exacerbated inter-regional differences too (e.g. concentration of RAE income in the SE).

Second, there were fears that institutions would make decisions based solely on self interest which collectively might result in sub-optimal outcomes both for the country and its regions (e.g. viability of vulnerable subject provision). In practice, again, though HEFCE retains a safety mechanism to intervene in such situations, much academic re-profiling has resulted in sustaining, and even growing, areas of vulnerable provision by universities reprogramming, course redesign and branding and some intra-regional cross institutional restructuring and programme rationalisation (e.g. Newcastle and Durham exchanged staff and programmes to create critical mass in linguistics and theology respectively).

It would probably be true to say that all the universities, while welcoming the opportunity to access additional funding to support regional activity, would not like to see core resource diverted from central funding to specifically regional purpose. As a small region it is widely believed that funding allocated on the basis of regionally determined spatial metrics would result in less resource coming to the NE, not more.

Although HEFCE is a national organisation, whose mission is to support the development of excellence in teaching, learning, widening participation and research and knowledge transfer. it believes ‘there are significant opportunities for us to work with regional stakeholders to support institutions in making the most effective contribution to their region or area, helping them to meet the needs of that region’s students, economy and civil society. This will also contribute directly to HEFCE’s national strategy.’

HEFCE’s approach to the regions recognises the diversity of HEIs and of regions, and does not seek to impose any blueprint, but rather to support the relationships that are already being



developed between regional bodies and HEIs. They are careful to avoid being constrained to looking only at Government Office regions, but also take into account smaller areas and trans-regional issues as appropriate.

HEFCE's support for regional action includes:

- providing support to HE regional associations
- publishing an annual set of regional profiles of higher education in England
- regional dimensions for some funding streams, where considered appropriate, for example, Aimhigher, and the Higher Education Innovation Fund (HEIF 2).
- direct support to institutions through small regional teams, based in its Bristol office
- a series of regional priorities.

HEFCE's regional approach is supported by nine regional teams.

There has been no direct form of reward for regional engagement, although there has been a variety of programmes to support objectives that have overlapped with the regional agenda. Central has been support for interaction with business and the community through the HEROBC and HEIF programmes which are discussed in detail in the next chapter. Although not restricted to regional partnerships, these programmes have in effect assisted in the development of the university infrastructure for regional engagement also.

Other programmes such as widening participation and student community activity have also had a predominantly regional impact, even though the policies were not couched in regional terms.

Regional engagement is not a formal requirement at universities in the UK although it is seen as a key element of third strand.

When RDAs were established HEFCE provided grant funding of £25,000 towards the cost of Higher Education Regional Associations (HERAs) to help them engage with the new agencies. Also it monitored the responsibilities of the previously established Regional Consultants to engage with individual HEIs as well as the regional associations. "It has also increasingly looked to HERAs to undertake some kind of brokerage role for the allocation of funds for HEIF, ASNs and linking Learning Networks while continuing to receive separate advice from its Regional Advisory Groups (RAGs) made up of representatives of RDAs, Regional Government Offices (GOs) and the LSC." (Brickwood and Brown July 2005)

While in its Current Strategic Plan 2003-8 recognition is given to HEFCE's agenda, it is clear that HEFCE sees HERAs as potentially able to help the council understand the regional complications of some of its national policies. (See also Skills White Paper March 2005). How able they are to adopt a brokerage role is yet to be seen.

"However this raises important issues about the balance between HEFCE's relationships with individual institutions in the region and its relationship with the HERA as mediator by the Regional Consultant." (Brickwood and Brown 2005) It also raises questions and concerns about HEFCE "Using the regional agenda to develop a planning role by the back door."

As already noted the central funding of HEIs is delivered by the HEFCE at the level of England, and the only funds which come from the regional scale are minor discretionary funds provided by the regional development agency and other local partners for specific regional projects in technology transfer and other forms of outreach. Similarly, there is no regional scale management of universities as they are autonomous institutions – other public bodies whether at national or regional scale simply provide funding.

## ***Regional higher education system and governance***

### **Basic profile and character of HEIs in the region**

#### **Key figures**

Total number of students – 89,898 full-time and part-time students

Total HEFCE funding - £257 million

Total turnover - £645 million (2002/3)

Percentage non HEFCE income - 60.22%

Total employees – c14,000

Percentage of regional GDP – 2.3%

The North East of England has five principal universities plus a regional office of the Open University. The five campus-based universities in the region attract 89,898 full-time and part-time students, which equates to 72,781 full-time equivalents (FTEs) (2003-04). The institutions range in size from the Northumbria University with almost 19,000 student FTEs, to the University of Sunderland with almost 12,000 student FTEs. In addition there are 17 further education colleges offering a wide range of higher education courses, although with relatively fewer students registered compared with other English regions: 6,070 in 2003/4 (4,724 FTEs).

The university sector in the UK is diverse in character, and accordingly the region's universities represent some of the different types found within the UK as a whole. There are two pre-1992 universities, Newcastle and Durham. Newcastle is a typical civic or redbrick university with a strong science and technology base and a full range of departments including medicine and dentistry, and the largest agriculture school in the country. Durham is the third oldest English university, with a strong international research orientation. Durham has a residential college structure and it dominates the relatively small town in which it is based, but also operates a second campus at Stockton in the Tees Valley.

No new universities were established in the region in the great expansion of the 1960s, but three polytechnics formed from existing technical colleges were subsequently converted to universities in the early 1990s. Northumbria University is the largest university in the region by student numbers. Sunderland University is more local in orientation and has a strong network of collaborations with 7 FE Colleges in its locality and the wider region. Teesside University also has a strong local emphasis and has a track record of support for the local process industries as well as newer specialisations in digital technologies. It has a large and thriving School of Health & Social Care, and a high reputation for widening participation in higher education in an area that is marked by disadvantage and relatively low levels of academic attainment. Descriptions of the five universities are contained in the annex.

## **CHAPTER III: CONTRIBUTION OF RESEARCH TO REGIONAL INNOVATION**

### ***Introduction***

The contribution that universities make to regional economic development through the support for innovation is a central element of the UK's policies for the science base and for the regional contribution of universities. This chapter will examine the national policy context for university-business interaction including the regional innovation consequences of national research policy, as well as examining case studies of projects and partnerships within the North East of England.

There are a number of specific issues that need to be addressed and which will be developed through the chapter. Underpinning the whole discussion are the perceived tensions between national policies favouring research excellence and the regional desire to see localised benefits from exploitation of university knowledge.

A second major theme is the consequences of greater devolution, notably due to the creation of the regional development agency, and the emergence of a multi level governance of innovation policy with greater involvement of regional institutions, and also a role for the EU, notably through regional funding.

A third key theme is the complexity of local partnerships, at a number of different levels and scales. A recurrent issue in the region is the need for the universities to work together both to meet the desires of particular regional partners as well as to achieve economies of scale and scope. Individual projects and centres involve an increasingly complicated set of relationships between multiple funders and sponsors, collaborators (both inside and outside the region) and firms, with many projects now focusing on collaboration with groups of firms. Altogether the challenge of effectively managing these partnerships imposes considerable demands on the universities.

### ***Framework conditions for promoting research and innovation***

#### **Policies for research in HEIs**

UK national HE research policy is strongly rooted in the principle of the dual funding system and an emphasis on support for excellence. The long established funding system for research in HE is that government provides some core funds for research as part of the block grant to supplement the competitive grants awarded through the research councils and from other funding bodies and contracts. The levels of funding and balance between core and additional funds have varied over time and vary considerably between universities, but have largely been determined by excellence only with no regional policy dimension.

#### **Core research funds**

The core grant for research was initially introduced to support the infrastructure costs of research and those areas of research which were unlikely to be funded by research councils. Research council grants were intended only to cover the additional costs of research and not full overheads, with charitable research funders also refusing to pay overheads, with the core grant intended to cover the basic infrastructure costs. Over time this core grant has moved from a rather opaque and undifferentiated allocation system to a formula-driven system underpinned by the research assessment exercise. Thus the core HEFCE grant for research,

known as QR (quality research funding) is now allocated according to a formula for each disciplinary cost centre based on the Research Assessment Exercise (RAE) score for that cost centre in each university and the scale of the research activity declared by the institution. Thus a particular RAE grade is combined with a disciplinary unit of resource and a full time equivalent scale driver to calculate the level of grant. Allocations for each cost centre in a university are then aggregated to give the institutional grant. A new formula will be introduced post 2008 as a result in changes in the structure of the RAE grading system, although the new funding formula has not been defined yet.

Three important principles should be remembered here in considering the implications for regional engagement.

First the QR income is driven by an RAE system that emphasises international quality research, and over time the degree of selectivity towards international quality research has increased, with most of the money now being allocated only to the top two grades (5, 5\*) on a seven point scale. Small amounts are given to the third grade (4) but funds have been withdrawn from the points below that (1,2,3b,3a). The effect of this and the differentiated results in the RAE exercise have been to sharply increase the differential funding amongst universities. Newcastle, with the highest QR income stream in the North East will get £30.6m in 2005/6 compared with around £1m or less in each of the three new universities, even though the difference in student numbers is relatively small. Durham with a very high average RAE score does even better in proportional terms with £21.4m on a lower overall turnover. Because this system, is purely formula driven based on research quality then there is no regional consideration in research funding and the level of funding in a region depends on the success of individual universities, and indeed individual departments, in their research, and particularly in the submission made to the RAE panels. The Scottish, Welsh and Northern Irish universities have their own funding councils which make awards of research funding based on the national RAE scores, but with their own distinct funding formulae and with regionally determined levels of resource. Thus the Scottish Executive may decide to provide more funding for the Scottish universities than would be allocated under the English QR system, and to distribute these resources in a more equitable way between institutions.

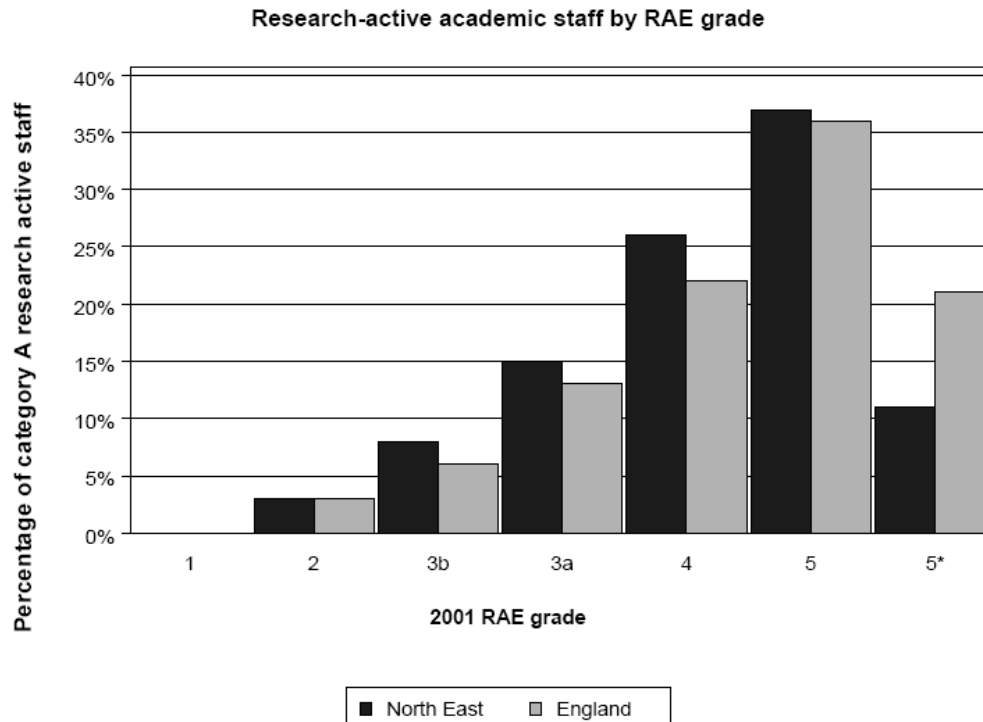
Second, the funding is aggregated for each institution and the allocation of funds within the institution is at the discretion of the university. Thus whilst there may be internal pressure to allocate the funds to the schools or departments which scored well in the RAE, institutions make their own decisions on allocation according to the need to support historic patterns of investment and costs, strategic investments, and the effects of other funding streams. Institutions need to take cognisance of possible future income in this allocation, concentrating resources in those areas where there may be future funding opportunities or where investment might result in high RAE scores and hence future streams of QR funding. Again the outcomes for a region will depend on the needs of the individual universities to protect future funding streams and opportunities.

Third, the criteria for research excellence are driven by national panels which take no account of regional needs or considerations, but work in a national university or innovation system. One criticism of this process is that there is a tendency to focus the assessment of quality on publication of research results in top international peer-reviewed journals. Although this is an inevitable consequence of trying to assess international quality in a comparable way across broad disciplinary areas, the implication is that rewards are focused on research that is publishable in the more academic journals rather than research that may be regionally applicable. This does not necessarily mean that research that is valued in the RAE cannot also be of great regional significance, but a tension is introduced such that regionally focused work will only be valued if it is simultaneously deemed worthy of publication in the leading journals. In practice many institutions try to do both regionally relevant and internationally valued academic research often recognising these are distinct even if related. The guidance for the 2008 RAE suggests that non-journal outputs can be regarded equally with international

peer review journal articles if the quality is equivalent, although the academic community is sceptical about this.

The results for the North East universities are presented below. These follow the pattern nationally in that the post-1992 universities tended to achieve lower scores where they submitted, whilst the older universities had a greater proportion of 4s and 5s, and much higher numbers submitted. (see annex for a list of the high scoring units)

Figure 3.1 Percentage of research-active staff by RAE grade for the North East universities (2001)



It is clear that the two research-driven universities dominate discussions about the RAE (and funding as we will see below). Proportionately, Durham has a higher overall grade per member of staff than Newcastle, and appears at number 12 in the raw rankings (average grade per person submitted), yet because of its greater size Newcastle ranks higher in ‘research power’ (grade multiplied by staff numbers normalised to a proportion of the highest scoring university). A research power perspective shows that Newcastle and Durham combined have a research power equivalent to a university on the edge of the top 5 in the country. This may not be a meaningful comparison as other regions also have more than one research university, but it shows there is a significant critical mass of research capacity.

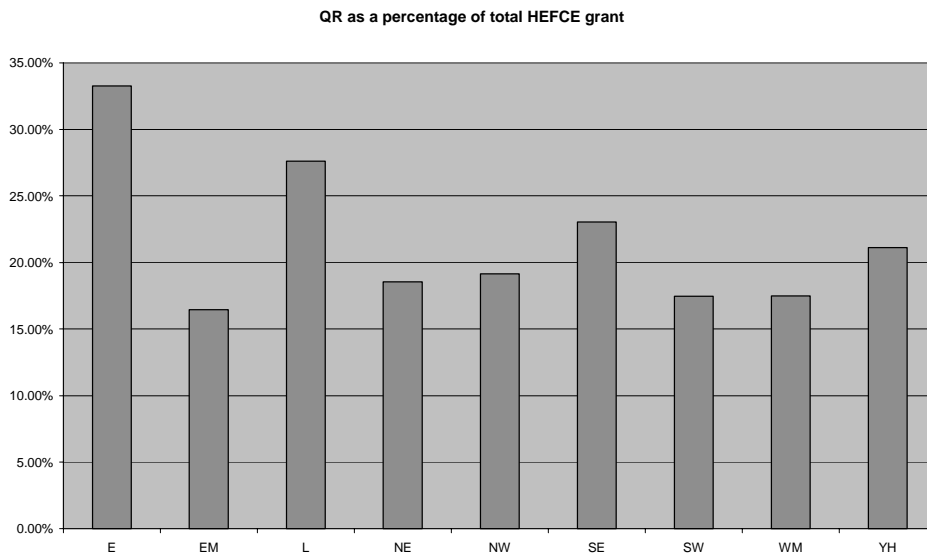
The consequences of these outcomes for funding can be seen for 2005/6 in the tables in the annex. The level of teaching funds from the HEFCE, shows a broad similarity of funding for each of the institutions, Newcastle and Northumbria coming out highest due to greater FTEs and in Newcastle’s case the additional costs of medical teaching.

If we then compare these figures with the funding available for research we can see the effects of concentration and selectivity. Newcastle and Durham each receive 20-30 times as much as the next university and Newcastle receives 60 times as much as Teesside. These amounts are added to give the final grant which is shown with the student fee income available from home based undergraduates to show the total HEFCE funded or regulated resource.

Comparing these figures with other regions, and taking into account the small size of the North East region we can show the HEFCE research grant as a share of total HEFCE grant for

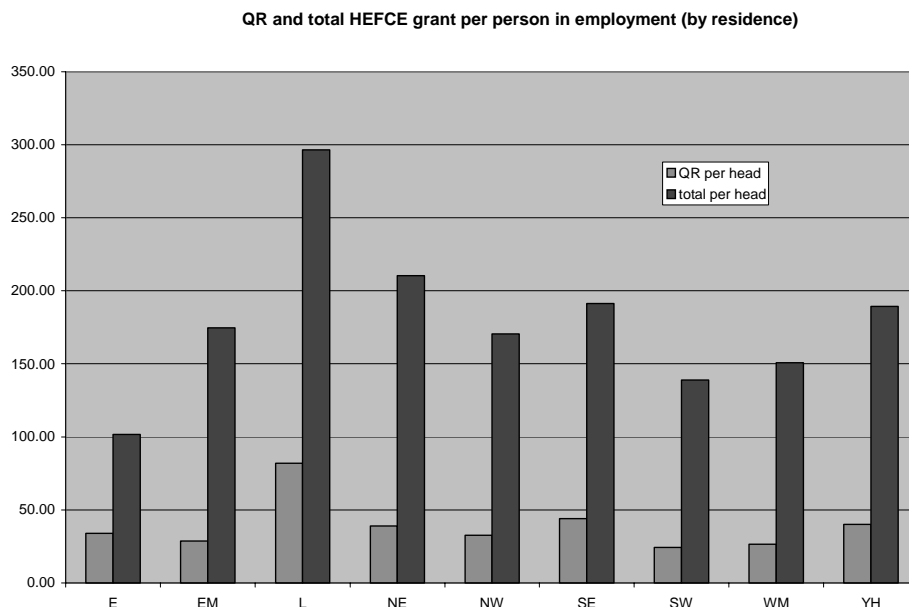
each of the English regions. This shows that the North East has a respectable level of research allocation, lower than some regions, but in the middle of the range.

Figure 3.2: HEFCE research grant (QR) as proportion of total HEFCE grant for English regions (2002/3)



Another way of looking at this is to compare with the scale of the region, using the employment base as a denominator. The following figure shows the level of QR and total HEFCE funds available in region relative to the population in employment, which shows that the North East does extremely well in overall funds being the second highest region and fourth best on QR funds.

Figure 3.3: QR and total HEFCE grant per person in employment for English regions (2002/3)



### Competitive grant income

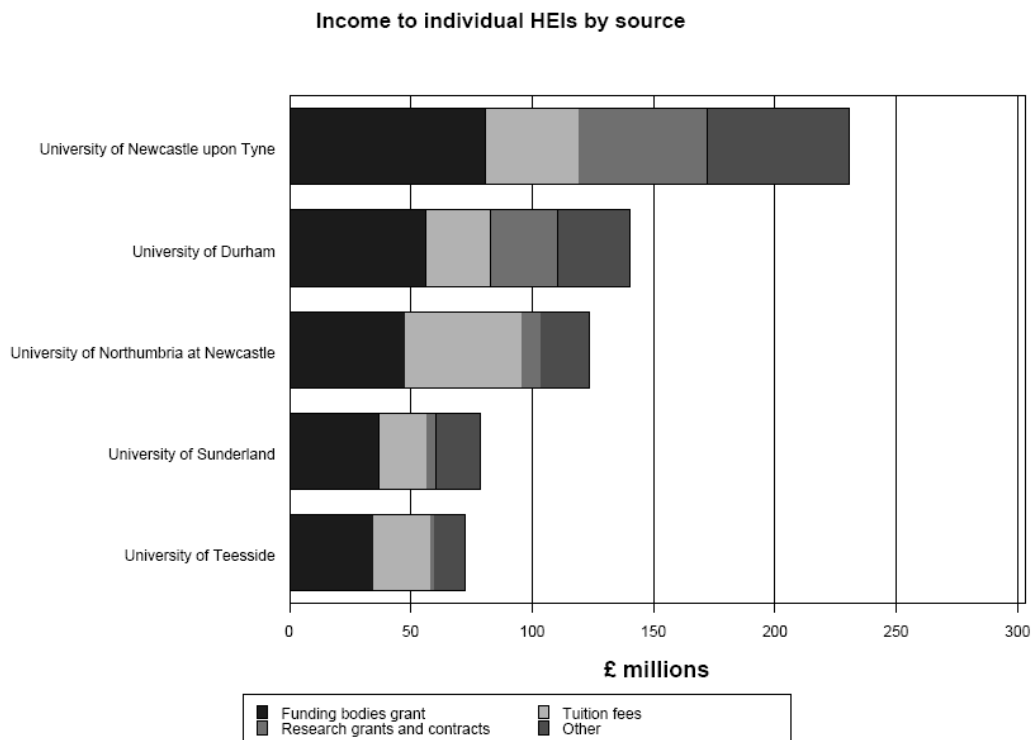
Parallel with the QR income flow is the research income from competitive grants, from research councils, other public institutions, charitable foundations, the European Union, and

research contacts from government, firms and non-profit bodies. Again such funds are largely awarded based on quality and with little reference to regional needs or balance. One slight exception to this rule again is that some research council programmes in the past have had a regional capacity-building objective and have supported the creation of regional centres of excellence. This might not mean a centre in every region, and will still imply competition between institutions. Current examples include the development of regional e-science centres which provide infrastructures for a variety of other researchers and disciplines in each region.

There is of course scope for a university to develop specific proposals to a research council for high quality research which involves collaboration with regional partners and addressing the needs of SMEs and other firms in the region. Indeed the research councils have been acutely aware in recent years of the need to engage business in their programmes and have developed a series of programmes that required collaboration with business. Such programmes are however not usually framed within the context of regional innovation needs, but are open to collaboration with firms in any region in the UK.

In addition to collaboration with firms there are considerable opportunities for collaboration with other research organisations – many research council programmes encourage collaboration with other universities and with public research laboratories, including those funded directly by the research councils. Some research councils have extensive networks of laboratories (eg the Medical Research Council, or the Natural Environment Research Council) and make those facilities open to collaboration with university scientists. Others focus on facilitating access to the Central Labs for the Research Councils including the two big physical science labs in Oxfordshire and Cheshire. Again such collaborations, and indeed the distribution of such labs, are not determined by any regional criteria. The North East has little presence of such labs beyond an MRC lab in Newcastle. There are however a number of research council funded centres within the universities themselves.

Figure 3.4: Income to individual HEIs by source 2003/4



Source Regional Profiles 2005

## **Trends in funding**

It is recognised by government that the UK is the most successful of the larger international economies in terms of the quality, impact and international recognition of its research base. With 1% of the world's population, the UK undertakes 4.5% of its R&D, produces 8% of scientific publications, receiving 9% of citations in other papers, and wins 10% of international science prizes. Quality is undoubted, UK HEIs attract more external funding proportionately than HEIs in any other country, and cost efficiency is better than in any other G7 country. The problem has been underspending relative to other G7 countries, and a decline over time. Current policy is therefore to redress this balance with additional investment in the core science budget, as recognised in the Cross Cutting Review of Science and Research in the 2002 Spending Review.

The additional investment is both in the form of:

1. a growth in research spending – through increased budgets for the research councils and through the QR element of the Funding Council allocations to universities, and through additional programmes such as the Strategic Research Infrastructure Fund – which allocates capital funding to universities in proportion to their research performance – and
2. new third strand commercialisation programmes.

In parallel there is also a recognition that the funding gap in the universities is partly due to the inability of universities to fully recover the true costs of research from their funders – including government departments.

‘What is required is that in a system where flows of government funding are properly resourced and balanced, each university should seek to recover across the full range of funding sources and research sponsors, the full economic costs of the research performed, less what the institution chooses to make available from other non-publicly funded income sources.’ (Cross Cutting Review of Science and Research, 2002).

As a result government has required universities to identify the full economic costs of research and to charge this full cost to both commercial and government bodies. In return the overhead rate on research council projects has been increased from 46% of additional staff costs to 80% a payment of 80% of the full economic cost.

In considering this additional investment, regional issues are explicitly ruled out, and stress is made on the need to fund excellence ‘wherever it is to be found’. In terms of devolution, science is regarded as a matter reserved for the UK level as opposed to education which is devolved. Consequently, it is recognised that there is a need to co-ordinate between the UK and devolved bodies to ensure that there is not ‘a false market between universities in different countries of the United Kingdom.’

## **National policies for collaboration with business**

The public policy landscape supporting HE-business interaction has become considerably more complex in recent years through a combination of growth in national schemes targeted at universities, increased participation of universities in regional and regeneration programmes, and the effects of devolution through the establishment of parallel but distinct schemes in the devolved nations. These new schemes build on a set of programmes to promote collaborative research, graduate placement and teaching companies, which has been in place for many years. What is new however is the introduction of what is expected to become a permanent strand of core grant funding for outreach and entrepreneurial activity.

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.

In recent years there has been a steady increase in the focus given to industrial collaboration within public research support. Prior to the 1980s there was modest involvement of industry in research council funded programmes, but the early 1980s saw the formation of the Alvey Programme as a significant attempt to ensure that UK industry and academia caught up with the US and Japanese lead in areas of IT. Alvey funded pre-competitive collaborative research, often involving academic and industrial partnerships, with the academic funding being met by additional funding from the Science and Engineering Research Council. Soon SERC (later EPSRC) and the other research councils were launching further schemes to encourage collaboration with industry, and many of these were brought together under the LINK programme of the late 1980s which continues today.

Also during the 1980s there was a growing awareness of the potential role of universities in economic development through the better exploitation of their knowledge base, either through the transfer of expertise or inventions to the private sector to enhance growth opportunities, or by the direct establishment of new companies to exploit the ideas that were perceived to be emerging from universities. As a consequence there was a rapid growth of science parks and technology transfer agencies and initiatives, in part driven by the need for universities to seek new revenue generation opportunities, but also driven and funded by national and regional stakeholders keen to see a benefit for the UK and its local economies. There has also been the development from the early 1980s of Industrial Liaison Officers (ILOs) and other forms of university companies, and consultancy organisations, all of which have played different roles in the exploitation of academic knowledge, mainly on a more local scale (Charles et al 1995).

During the 1980s there were also major shifts in policy in the UK concerning the routes by which IP could be exploited, although the basic rights were largely unchanged. Prior to 1985, rights of first refusal on publicly-funded research IP went to the National Research and Development Corporation, later renamed British Technology Group (BTG), and royalties were split with the university. Universities could though exploit anything that NRDC refused. Subsequently with the abolition of the NRDC/BTG monopoly, universities were free to develop their own strategies for commercialisation, but could still use BTG as one route, although BTG would only take on a licence for exploitation if they felt it was commercially advantageous to them. BTG have also been very much concerned with the international exploitation of patents as formal IP, and as such have only formed part of the overall framework (Charles and Howells, 1992; Harvey, 1996). Since BTG have now been privatised their focus is very much more restricted to clearly exploitable technologies.

By the mid-1990s then most universities had some form of institutional arrangements for the commercialisation of technology and interaction with business, although often rather ad hoc in nature. Some had relatively large and sophisticated exploitation agencies or companies, whilst others had one or two people within the research contracts office with a wider commercial engagement role.

Underpinning this development of a modest institutional capacity for engagement had been a range of government programmes and initiatives. Some were very short-lived and included a series of initiatives to establish networks of centres focused on industrial applications. A network of **Regional Technology Centres** was established to promote technology transfer, but with only three years of start-up funds, and in all but a few regions declined and died. The North East was the main exception to this where RTC North has been highly successful and has grown to employ around 60 staff and also houses the office of Universities for the North East.

A more enduring scheme is the **Teaching Company Scheme (TCS)**, now known as **Knowledge Transfer Partnerships**, and which has operated very successfully since the late 1970s. In a typical KTP project a university and a company develop a multi-annual

development project and employ one or more ‘associates’ in the form of new graduates to work on the project over a two year period. The university provides supervision for the associates, registers them for a higher degree and is paid a contribution for their time input. The company pays some of the costs of employing the associates, and a range of government departments pay the balance of the costs. The public subsidy varies according to the size of the company and in some cases to the level of need in the region. The North East experience is provided later in this chapter.

## **Policy developments since 1997**

Following the DTI white paper in 1998, ‘Building the Knowledge Driven Economy’ funding was provided for the establishment of 12 Science Enterprise Centres through the **Science Enterprise Challenge**. They provide a focus for commercialisation and entrepreneurship, aimed at both academic staff and students through the introduction of enterprise into the curriculum.

The centres deliver a number of specific programmes including:

- Teaching enterprise and entrepreneurship to science and technology students
- Transferring ideas and knowhow to business
- Encouraging and supporting the development of new businesses by staff and students based upon intellectual property. (OST, 2002)

Each of the centres had to develop an initial five year business plan, with a set of actions and targets, with the intention that the centre would become self financing from revenue activities and capital in spin off firms. In reality several centres have been seeking additional funding subsequently to develop and enhance their programmes both from national sources and the regional development agencies.

Although regionally based in most cases around groups of universities, there are two main types of SEC. One group have emerged from existing regional partnerships of universities where one or more research universities have been able to establish the critical mass for commercialisation activities and other regionally based institutions have joined the project as partners. A second group have been more limited in scope and have been developed by one or two individual universities with a strong research base and track record of spin offs and commercialisation.

These different models represent the central tension of much of the university-business policy agenda between a concern for excellence in past success, and a desire to promote regionally balanced growth and development. The initial round of SECs were selected on the basis of excellence by a national committee, but then additional funds were found to add in extra regional collaboratively-focused projects where there were regional gaps. There was no requirement placed on the strongest institutions to work with other weaker institutions in their region. This tension also reflects a concern on the one hand to promote commercialisation which might involve international partnerships and overseas companies, and a more regionally focused developmental strategy. Clearly, whilst the SECs serve the interests of their universities which involves revenue generation from wherever possible, there is a national and regional agenda concerned with ensuring some local impacts through spin off activity.

### **North East Centre for Scientific Enterprise (NECSE)**

The North East engagement in the SEC programme was through NECSE, a collaborative project led by the Universities of Durham and Newcastle and with involvement from the other three universities in the region.

The initial application for NECSE was made on the basis of a partnership of all five universities, but was refused on the grounds that there should be a stronger focus on the commercialisation of technology from departments graded 4 and 5 in the RAE, and so a second proposal was eventually accepted with a stronger focus on 4 and 5 graded departments in Durham and Newcastle, but with the inclusion of the other three universities in elements of the project concerned with graduate enterprise and curriculum development.

The project had two main elements.

The development of commercialisation capacity in Newcastle and Durham involving additional staff members and a collaborative approach to commercialisation between the two universities.

The development of enterprise material in the mainstream curriculum and support for graduate enterprise programmes.

The project was awarded £1.3m over a five year period and started in August 2000.

The project's achievements have been varied. There has been an increase in commercialisation activity in Newcastle and Durham (described in more detail later), although perhaps less than forecast as a result of optimistic forecasts and problems with tax changes that suppressed spin off formation for 18 months recently. More significantly there has been a great increase in enterprise education in the curriculum in all five universities in the region (reported in chapter 4).

The project has facilitated collaboration between the universities – increasing collaboration between Newcastle and Durham in sharing experiences and knowledge on commercialisation and IP management, and forming an effective community of enterprise specialists across the region. The region's universities, for example, now host an annual business plan competition – Blueprint, which is helping to raise the profile of and support for graduate and academic enterprise.

Associated with the SEC programme has been the Cambridge University project to join forces with MIT to establish a **Cambridge-MIT Institute (CMI)** to promote the international transfer of expertise in commercialisation. The CMI was announced by Chancellor of the Exchequer Gordon Brown in 1999 as a model of good practice for the rest of the UK university sector. The controversial nature of the project arose from the decision by government to award the project with some £60 million funds over five years, with much of the money going to MIT and without open competition from other universities for the funds. The scale of the award was considerably larger than the SEC programme, and has consequently been the subject of considerable scrutiny and debate since the launch.

The Cambridge-MIT Institute's programmes encompass undergraduate, graduate student, and staff exchanges; a programme of integrated research; the adaptation to Britain of professional practice programmes developed at MIT; and the creation of a national competitiveness network in Britain. The National Competitiveness Network (NCN) run by CMI provides networked support for the SECs, plus regional development agencies and other business and research groups. NCN supports workshops and lectures, bursaries for an entrepreneurship development programme, and PRAXIS, a technology transfer training programme for university staff and a number of staff from the North east have benefited from this programme through visits to MIT and seminars on commercialisation.

In parallel with the SEC programme, the **University Challenge Fund** was established with funding from the Treasury, the Wellcome Trust and the Gatsby Charitable Foundation. UCF awarded grants to a limited number of institutions (some operating in collaboration) in order to establish rolling funds to support commercialisation projects through seed funding. Altogether some £45 million was provided initially to provide the seed funds, with a further 25% of the total fund being raised by the universities themselves. Unlike other programmes these funds could only be used for commercialisation costs such as accessing managerial

skills, intellectual property costs, R&D, prototype development, business plans, and legal costs. £45m was allocated in the first round of the competition in 1999, (with 15 seed funds being set up) and £15m more recently in October 2001 (which provided for an additional 4 seed funds, and 1 extension). 57 universities now have access to UC seed funding. In the first two years of operation 105 new spinouts were created and £26.8m third party investment was attracted to complement the £16.8m UC funds committed. The North East universities were not successful in the UCF programme, although at least one Newcastle spin off firm has received investment from a UCF seed fund through a partner institution from another region.

The SEC and UCF were both national initiatives and were available across all the 'nations' within the UK, but on the basis of a competitive bidding process, which meant that only the most active universities tended to be supported. In England and Northern Ireland, this selective approach was accompanied by the **Higher Education Reach Out to Business and the Community (HEROBC)** fund, which aimed to provide support to the majority of HEIs for the further development of business interaction.

HEROBC was an important initiative in that it provided

'special funding for activities to increase (HEIs') capability to respond to the needs of business, including companies of all sizes and the wider community, where this will lead to wealth creation. The new fund is intended to initiate a third stream of funding, complementing the Council's existing grant for teaching and research, to reward and encourage HEIs to enhance their interaction with business. The fund will provide a platform of core funding to help HEIs to put into practice organisational and structural arrangements to develop and implement their strategic aims in this area in order to contribute to economic growth and competitiveness.' (HEFCE 1999/16)

As such it was intended to be the first step towards a permanent funding stream within the core grant to universities.

The objectives of the scheme are set out in full in the annex. They are notable in the breadth of coverage and the emphasis on culture change and institutional development. Care was also taken to avoid prescription of the approach to be taken by individual institutions, with an emphasis on institutions identifying their own strategic needs and making bids accordingly from a comprehensive menu of possible interventions.

HEROBC was launched during 1999 with a first tranche of £60 million awarded for three-year projects in 87 institutions or consortia. Indicative budgets were proposed of around £300,000, £150,000 and £50,000 per year depending on the scale of an institution, its outreach activities and the proposed activity and outputs. A second round of funding in 2000 resulted in a further 50 awards totalling £22 million. The second round covered many of the institutions that were unsuccessful in the first round, but also included 11 collaborative projects.

Further developments have followed in 2001 with the DTI/DfEE White Paper on Enterprise, Skills and Innovation, 'Opportunity for All in a World of Change'. This particularly focused on the role of universities in underpinning economic vibrancy within a context of support for clusters and innovation. For example the White Paper states that:

*'The role of our universities in the economy is crucial. They are powerful drivers of innovation and change in science and technology, the arts, humanities, design and other creative disciplines. They produce people with knowledge and skills; they generate new knowledge and import it from diverse sources; and they apply knowledge in a range of environments. They are also the seedbed for new industries, products and services and are at the hub of business networks and industrial clusters of the knowledge economy.'* (DTI/DfEE, 2001),

whilst a previous DTI White Paper on Science and Innovation policy also stresses the role of RDAs and of universities in clusters.

*'While some elements of the framework for innovation can only be determined through national action, there are significant differences in innovation between regions, calling for different approaches. .... While all regions must participate in the economic success of the country through innovation, priorities for action within the regions differ. .... Part of RDAs' role is to support the development of clusters, geographical concentrations of companies, specialised suppliers and associated institutions such as universities, co-located for mutual competitive advantage'. (DTI, 2000)*

The 2001 White Paper launched a new initiative to establish **University Innovation Centres**, large, regionally-based, research and innovation centres often focused on collaboration between HEIs. Each University Innovation Centre is focused on a sector recognised as being of strategic importance to the region it is based in and is intended to serve as an exemplar of collaboration between industry and higher education. It is anticipated that they will inspire similar projects in other sectors and regions. Further University Innovation Centres may be established, with funding from a range of other sources including the new Higher Education Innovation Fund (see below). The first five UICs were awarded a total of £30 million funding.

**Nanotechnology and Microsystems in the North East.** (allocated funding of £7.2 m). The UIC for nanotechnology and microsystems is a national multidisciplinary resource based in the five universities in the North East (Newcastle, Durham, Northumbria, Teesside and Sunderland) plus industrial partners. It is also a key component of the Centre of Excellence in Nanotechnology, Micro and Photonic Systems, (CENAMPS). Some of the industrial partners involved, alongside several high-tech SMEs, include Filtronic, Atmel, ICI, BAE Systems, Procter & Gamble and DuPont. The UIC also aims to catalyse the growth of new industrial clusters in the NE and UK. Its facilities are open to users from industry and academia, also offering incubation and space for spin-offs, visiting users and embedded teams.

In parallel a set of **New Technology Institutes** have also been established to support advanced skills development in the regions. The NTIs are more strongly connected with vocational skills and the needs of local SMEs. Focused on ICT and other advanced technology learning programmes 18 regional groups of higher education institutions, further education colleges, and private sector partners funded by £25m were announced in 2002, two in each of the English regions. The collaborative programmes they will develop between universities, colleges and other private training providers will mainly offer courses at the technician level, but will also develop foundation degrees (two year qualifications overlapping with the first year of a university degree) and pathways through a first degree to postgraduate level.

In the North East the two NTIs were based at Northumbria and Teesside Universities, although involving partnership with the other universities and colleges in the region. They are examined in more detail in chapter 4.

The final element arising from the White Paper is that as part of the shift towards a more permanent structure for third strand funding, HEROBC has now been subsumed into a new HEFCE programme, the **Higher Education Innovation Fund**. This was launched in 2001 alongside final calls under the SEC and UCF programmes.

This first round of HEIF provided an additional £140 million for the years 2001/2 to 2003/4, including an additional £15 million for SEC centres and £15 million for University Challenge Funds. HEIF had very similar objectives and approaches to HEROBC and sought explicitly to enhance developments initially funded by the earlier programme. Subsequently it is intended that HEIF will be the main vehicle for supporting business interaction core funding, incorporating University Innovation Centre projects as well.

An invitation to apply for funds under HEIF 2 was launched in December 2003 for the period 2004-6. A total of 124 awards were made with funding of £186 million, 46 of which involve collaboration involving more than 100 higher education institutions. A new element was the formation of a network of 22 new centres for knowledge exchange activity supported by £16

million of the total funding. The centres are intended to provide specialised shared services for business and community partners and be exemplars of good practice.

Another new element in the selection of HEIF2 projects was the introduction of Regional Advisory Groups (RAGs), comprising HEFCE regional consultants and representatives from the relevant Government Office and Regional Development Agencies (RDAs), to give a regional perspective.

*Table : HEIF2 allocations in the North East*

University of Durham	£2,091,600
University of Newcastle upon Tyne	£2,000,000
University of Newcastle upon Tyne - lead HEI in collaboration with the universities of Durham, Northumbria, Sunderland and Teesside:	£1,426,881
University of Sunderland	£1,500,000
University of Sunderland - lead HEI in collaboration with universities of Durham and Teesside (Centre for Knowledge Exchange)	£324,563
University of Teesside	£2,345,510
University of Teesside - lead HEI in collaboration with the University of Sunderland (Centre for Knowledge Exchange)	£396,500

Teesside's CKE is the Digital Knowledge Exchange (described later in the chapter)

Currently HEFCE are engaged in a consultation exercise on HEIF3, which includes a new formulaic approach to the allocation of funds.

## ***Responding to regional needs and demands***

### **Emergence of regional innovation policy in the North East**

All of the English RDAs were required to develop innovation action plans as part of their initial guidance from government, building upon existing innovation strategies developed through the government regional offices, often assisted by funding from the EU RITTS and RIS programmes. However, the resources available to the RDAs in support of this were very limited – the Competitiveness Fund launched in 1999 provided £250k per RDA in 1999/2000 and £440k per RDA in 2000/02. RDAs were highly limited in their use of funds from central government due to the funding streams being locked into central government programmes delivered in the regions, yet for some the need to compensate for historically low government R&D expenditure in the regions was a key objective. The North East Regional Economic Strategy (ONE, 1999) specifically focused on the universities as a vehicle for rebuilding the knowledge base in the absence of government R&D, identifying 'Placing universities and colleges at the heart of the Region's economy' as one of six main priorities. The weakness of the existing R&D base was recognized and the strategy stated that 'There is a widespread belief throughout the Region that the Government must direct more Treasury funded research to Universities outside London, particularly to the North East. This is essential to underpin the Region's approach to promoting knowledge transfer' (ONE, 1999, 59). One approach which was suggested was the idea of Advanced Centres of Excellence, also termed Centres of Discovery, which like the, then new, International Centre for Life (see later) would combine research, exploitation, spin offs, educational outreach, training and public understanding of

science. Four additional centres were proposed, but with the specific technology areas and mechanisms to be decided.

What then accelerated the debate in several of the RDAs was a decision by Government to allocate resources for a new synchrotron, known as DIAMOND, not to a laboratory in Cheshire in the North West as expected, but to Oxfordshire in the South East. Regardless of the complex arguments around the decision and the competing rationalities (Perry, 2003) the effect was to galvanise the energies of the scientific and political communities in the North West to argue for additional R&D funding to compensate for the likely downgrading and potential closure of the Daresbury Laboratory in Cheshire, having lost this investment. As part of the decision to allocate additional science resources to the region, a study of the science base in the region was undertaken by Arthur D. Little (ADL, 2001) and a North West Science Council was established to oversee the development of a future strategy.

The North East RDA and universities recognized the opportunities offered by this model, and sought to follow on very rapidly, using a similar approach to help to clarify its position regarding centres of excellence. Whilst the North East had not suffered a defining incident such as the Daresbury/Diamond decision, it had seen the closure of laboratories in former public corporations (British Gas in particular), and its attempts to get on the shortlist for the relocation of the Meteorological Office had been fruitless. So in early 2001, Arthur D Little were contracted to undertake a review of the research base in the North East in relation to current and future needs of key industry clusters.

The delivery of the ADL report in August 2001 provided a clear template for the region, combining some of the experiences of the work in the North West and the refinement of the previous work in the North East. There were several groups of recommendations:

Specific recommendations regarding clusters and cluster strategies in the region, and networking within the region and with other neighbouring regions.

The formation of a regional Science and Industry Council modelled on the North West experience of establishing a regional Science Council.

Further development of the two emergent centres of excellence in the region – in life sciences and in nanotechnology (the latter having recently been announced as a national UIC initiative based primarily in Newcastle University).

New centres of excellence based on energy and engineering, digital technologies and process industries.

An exploitation company, proof of concept funding, and some form of joint venture business school.

Plus further suggestions to enhance recruitment of talent, rationalise intermediaries, improve the region's image for science and technology and enhance collaboration between the universities. (ADL, 2001)

## **North East Strategy for Success**

ONE's response to the ADL report was the 'Strategy for Success', submitted to the DTI in the September of 2001, and implementing most of the recommendations of the ADL report. The core of the SfS was the formation of a Science and Industry Council, a regional exploitation agency and five 'Centres of Excellence', each to be established as non-profit companies. The five Centres would focus on life sciences, nanotechnology, new and renewable energy technologies, digital technologies and process industries – a mixture of novel technologies to the region and existing regional industrial and academic strengths. The regional exploitation agency, now known as NStar, would provide access to finance, proof of concept investment and commercialisation advice and assistance. The Science and Industry Council was established in December 2001, and CEOs for the five Centres were recruited during 2002.

During 2003 the five Centres began to develop their own models of operation and to prepare initial business plans. In each case resources were made available from ONE to pump prime the Centres over a five year period, including capital and research investment as well as recurrent costs, but each of the Centres was required to plan for self sufficiency from commercial and investment income at the end of that five year period. Overall it was estimated that the RDA would invest around £200 million over the five years in the Strategy for Success programme, but aiming to leverage a similar level of investment from ERDF, Framework Programme and other national programmes (ONE, 2003). Each of the Centres evolved quite distinct strategies dependent on the characteristics of the technologies and sectors they supported, and on the legacies of existing centres and activities they were able to build upon.

The five Centres of Excellence that were established during ‘Phase 1’ of the Strategy for Success project were intended to link the region’s research base to business, effectively acting as a bridge between the scientific research base and industrial commercialisation. Taking each of these in turn, the Centre of Excellence for Life Sciences (CELS), has been able to build upon the foundations set by the International Centre for Life (ICfL), BioSci North and a set of research programmes and regional networks initiated by the University of Newcastle, such as the Genetics Knowledge Park (one of the regional hubs of a national initiative to develop post-genomic technologies for the health sector), and with DoH and DTI funding, and BioNE<sup>2</sup>t (the research council funded North East Regional Post-genomics Network supporting scientific networking activities, expertise databases, symposia etc) and to develop linkages to businesses both regionally and internationally. The University of Newcastle in particular has been the source of several spin off biotech firms in recent years which have located in the incubator facilities of the ICfL, and a key role of CELS has been to develop and enhance this process, identifying areas of commercially-relevant research where the region is able to assemble a critical mass, assisting in its development, and supporting the commercialisation process. CELS has, however, also been very externally oriented, seeking to develop partnerships with other UK regional initiatives and centres of biotechnology research in order to build complementary networks within a national biotech strategy, as well as building overseas links and networks.

The New and Renewable Energy Centre (NaREC) has also built upon a series of existing regional assets, in terms of the academic research base such as the Engineering Design Centre and RCID in Newcastle, a physical site on the coast with extensive testing facilities for offshore based systems including converted docks and adjacent buildings, and an existing network of firms in the renewable energy and offshore sectors. NaREC builds more directly out of the region’s historic engineering base and technical expertise, as well as the previous rounds of innovation support in the made to order engineering field. However, the focus is on a new niche field which draws on that previous expertise in areas where it has not been fully exploited. NaREC, like CELS has also looked to wider collaborative activities and has worked with other regions in developing a networked model for a new UK energy research centre.

The three remaining Centres also developed in distinct fashions.. The Centre of Excellence for Nanotechnology, Photonics and Microsystems (CENAMPS) built upon an academic research base including the University Innovation Centre for Nanotechnology in Newcastle, and photonics expertise in Durham University. The Chemical and Process Industries (CPI) Centre has been more industry based, focused on the former ICI Wilton complex in Middlesbrough, and a corporate R&D centre that is in increasingly fragmented ownership as ICI has sold off the various businesses on the site to different multinational companies. CPI also incorporates the EPICC initiative from the previous round of policy. Finally the digital technologies centre, Codeworks, established itself as more of a virtual centre linking a number of cluster groupings across the region.



Complementing the five centres is NStar, an early stage venture company, created to invest £33m of funding in innovative technologies through the provision of proof of concept funding. Initial projects are currently under development.

In their first year of operation the five centres looked to develop distinct models of operation and collaboration with the region's universities. The outcome however was quite varied. There were some tensions and debates about models for IP ownership and commercialisation with negotiations over the mechanisms by which centres of excellence invest in university research and how the commercialisation of university IP might yield IP revenues for both the universities and the centres. These negotiations represented a familiar tension between the desire of universities to maximise their ownership and return on their IP, and the desire of commercialisation bodies to recover their investment in the costly and risky business of taking those ideas to market.

Inevitably there has been a highly differentiated relationship developed between the centres and the universities with some areas of very close partnership and some universities reporting very weak links with individual centres. Generally the focus of links has been with the stronger research units in the universities, whilst some centres, CPI in particular, have developed a stronger industry focus.

In summer 2004, the Strategy for Success programme was the subject of a Regional Assembly 'Scrutiny'.<sup>1</sup> Following on from this, ONE themselves undertook a review of the programme, and out of this, a plan for 'Phase 2' activity has been derived. Through the review, three of the five Centre of Excellence sectoral areas were identified as presenting the greatest potential for future economic growth, and accordingly Phase 2 has been structured around the three 'pillars' of Healthcare, Process and Energy and Environment, associated respectively with CELS, CPI and NaREC, with each pillar also incorporating industrial clusters and other 'delivery partners' (including university activities). The remaining two Centres (CENAMPS and Codeworks) are to have more of an underpinning and complementary role, supporting activity across the three sectoral pillars. The exploitation agency – NStar – is also seen to share in this supporting role, and is expected in Phase 2 to focus on securing funding from private sector sources. Further underpinning the 'pillar activity' will be the Northern Way Design Centre and a management skills programme, provided under the banner of the Regional Skills Partnership.

Each pillar will function under the direction of a Leadership Council, who will be responsible for setting a strategic vision and overseeing delivery of the project. The Science and Industry Council will continue in its present role, although its terms of reference will be reviewed in line with Phase 2 activity. ONE anticipate that each pillar has the potential to contribute in the region of £2bn to work towards closing what they have identified as the North East's £9bn productivity gap.

In order to facilitate the Agency's aim that the Centres of Excellence should become self-financing within a given period of time, ONE have proposed a two tier structure for the Centres, with the public duty elements of Centre activity financed by the Agency, and the remaining income generating elements run through a separate trading arm, responsible for commercialisation.

More recently, the emergence of the Northern Way has involved ONE in discussions with two other RDAs around a wider pan-regional strategy for investment in science in collaboration with the eight research-intensive universities in the North, known as the N8. Plans are currently being brought forward for additional university based science investments. Also three cities in the three regions were designated as science cities, Newcastle being the

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<sup>1</sup> One of the core roles of the North East Regional Assembly, as part of a 'Strengthening Accountability' programme, is to scrutinise the success of ONE in achieving the objectives of the Regional Economic Strategy, with a focus each year on a number of different policy areas.

representative for the North East. The RDA and Newcastle City Council are currently working with Newcastle University to develop a science city plan which incorporates the acquisition of a major development site near to the city centre and the University's campus and which is intended as a new university and translational research campus.

### ***Interfaces facilitating knowledge exploitation and transfer***

In recent years the universities in the North East have made huge efforts to engage with regional business through a considerable number of centres, programmes and individual initiatives. Some of these activities have been undertaken collectively either within the structure of Universities for the North East or its predecessor HESIN, or in bilateral partnerships, and many have involved collaboration with other regional partners.

Mechanisms have been developed to commercialise the research base of the HE sector and to promote technology transfer between the HEI and regional stakeholders including:

- research centres, collaboration and consultancy;
- intellectual property (IP) transactions;
- promotion of spin-offs, incubators, science parks; and
- training and labour mobility.

### **Research centres, contracts, collaboration and consultancy**

The universities have established a number of research and business support centres in recent years which have focused at least to some degree on collaboration with local industry or stimulating the development of new local enterprises. Some emerged from existing academic interests in the universities and later developed locally focused programmes with support from ERDF or regional funds. Others were established with start-up support from the ERDF specifically to support local SMEs. More recently some have been initiated by the universities to address major science and technology opportunities where EU, national and regional funds have been made available.

Each of the universities has a number of core strengths and related centres in science and technology, with some collaborative ventures linking combinations of two or more institutions.

- Durham – strengths in nanotechnology, photonics and microsystems, life and bio-sciences, e-science and digital technologies, chemistry, renewable energies, physics, and design, manufacture and management.
- Newcastle – strengths in nanotechnology, human genetics, engineering design, industrial statistics, marine technologies, chemical process intensification.
- Sunderland – strengths in automotive engineering, pharmacy, intelligent systems, digital technologies, e-commerce, materials testing, spectroscopic services, and artistic dimensions of glass
- Northumbria – strengths in photovoltaics, design, advanced materials, and electronic systems.
- Teesside – strengths in visualisation, digital technologies manufacturing systems and environmental technologies

Regional support for university-industry centres in the region dates back to ERDF-supported initiatives in the mid 1990s and notably what was referred to as the 'Three Rivers Project'. This 'project' consisted of three academic-industry collaborative centres, located in the three main conurbations of the region, each of which is located on a different river, hence the name. The three centres were organisationally separate, and emerged independently, but were

badged under a common theme at the instigation of the Government Office North East. Each of the centres addressed the needs of a particular generic type of industry, viewed in terms of the mode of production, and was based at a university, but with industrial representation on its management board. The three centres were:

European Process Industries Competitiveness Centre (EPICC) based at Teesside University, with support from a number of the large process industry companies based in the Teesside region, notably ICI and British Steel. EPICC developed a strong industry network which has formed the basis for the client base of the Centre for Process Innovation.

Centre for Achievement in Manufacturing and Management (CAMP) based in Sunderland University on Wearside, with a focus on high volume production industries, undertaking research and consultancy including business analysis, product design, manufacturing logistics, cost and performance measurement and supply chain management, and supported by a number of inward investors in the area including Nissan, Electrolux, and Black and Decker. This later evolved into AMAP (see case study).

In Newcastle, an existing Engineering Design Centre in the department of Marine Engineering in Newcastle University, that had focused on the development and dissemination of new design techniques in the made-to-order engineering industries extended its activities through the Regional (now Resource) Centre for Innovation and Design. RCID focused on working with local SMEs on shorter term projects.

As noted the centres all emerged from slightly different contexts, but shared a set of common principles in terms of the types of service offered, the close involvement of local companies, and a collaborative relationship with researchers in other universities within the region. All were dependent on ERDF support, and working within a regional innovation governance system set by the Northern Development Company and Government Office. All of these have subsequently continued in modified forms, EPICC being merged into the region's new Centre for Process Innovation, CAMP continuing as AMAP and RCID continuing in a similar form with a slightly changed name.

**Supporting an emerging North East automotive industry University of Sunderland -** Institute for Automotive and Manufacturing Best Practice (AMAP), Graduate Retention in the Automotive Sector (GRASP), Digital Factory and Engineering Fellows.

The location of Nissan near to Sunderland in the 1980s led to a number of important developments in university activities, starting in 1995 with the establishment of CAMP which eventually evolved into AMAP (Automotive Manufacturing & Advanced Practice). The close working relationship between Nissan (NMUK) and the university has evolved over this 10 year period and has led to a number of important joint activities such as GRASP (Graduate Retention in the Automotive sector) and a key role for the university in managing two out of the five regional NEPA (North East Productivity Alliance) projects – Engineering Fellows and Digital Factory.

The success of GRASP opened up whole new areas of partnership and collaboration and the university is now a key partner in other initiatives.

**RCID (Resource Centre for Innovation and Design) – University of Newcastle**

One of the universities' most successful outreach projects which has supported hundreds of local companies, the RCID was formed at the University of Newcastle in August 1995. Its continuing mission then was the support of innovation and design in the North East's SMEs.

The Centre has been jointly funded by the European Regional Development Fund (ERDF), the University of Newcastle, and contributions from regional growth-orientated businesses.

The establishment of the Centre reflects industrial opinion that competitive advantage can be enhanced through industry-academic collaboration. It is recognized that product development through innovative design can be expensive and often dependent on scarce resources. The RCID group of companies understand that collaboration and sharing of resources between SMEs and the universities is essential if effective research, development and technology transfer are to be conducted at the appropriate level of excellence.

The special requirements of those SMEs which include design and process or product development as part of their core business actively are addressed. Innovation includes creating new products and processes, devising new methods of managing these activities and enhancing the manufacturing and marketing functions. The combined strengths of business and the universities bring together a critical mass of expertise, knowledge and resource which is capable of meeting the challenges to be faced. This sharing of skills and experience also enables the transfer of best practice and new knowledge between the participating companies.

In addition to the so-called Three Rivers Centres, a number of other regionally oriented research and knowledge transfer centres have been established, often with some support from ERDF, and with a clear mission of working with local companies. Some had already come into existence before ERDF funding, but were able to make use of training grants or small recurrent cost grants to orient some of their work to local firms, whilst others used ERDF support to pump prime the establishment of the centre.

Examples of these would include a series of investments in Durham culminating in the Centre for Electronic Nanotechnology Systems (see case study in annex) as well as IADET (see box below) which also builds on previous projects. This evolving process is important – some centres failed to survive ERDF funding due to being unable to attract continued business from industry. In the case of electronics though there appears to have been some learning from one project to another.

In Newcastle examples would include the Industrial Statistics Research Unit (ISRU) who specialise in quality process systems in manufacturing. ISRU is an example of a centre that was formed many years ago (1984), but have evolved through access to Structural Funds and have been able to develop training and knowledge transfer activities targeted at regional SMEs. Currently ISRU can provide consultancy to local SMEs at subsidised rates through public support, and have numerous case studies of the benefits realised in terms of improved efficiencies, increased quality and yields, cost savings etc. ISRU is also, along with RCID, a member of the Stephenson Group which is a grouping of regionally oriented outreach units in the University. In addition to ISRU and RCID the group includes electron microscopy and chemical analysis services, the Design Unit which focuses on gear metrology, the Engineering Design Centre, and the Small Enterprise Research Unit.

#### **IADET (Institute for Agility and Digital Enterprise Technology) University of Durham**

IADET capitalises on recent advances in computer modelling, graphic visualisation and distributed information management to add value in product development, realisation and associated risk mitigation in manufacturing. The digital enterprise technology group of IADET feed the leading edge research they are doing directly to IADET's Agility Engineers who translate it into the practicalities necessary for business enhancement. IADET's team of Agility Engineers help businesses develop the skills and tools that are essential for responsiveness and success in areas such as: manufacturing strategy; physical plant and equipment; product design and customer, and market.

The project was launched in June 1999 and has been funded up until March 2005. Initially based on campus the team was relocated to new premises at NetPark (see separate case study). The overall aim is to assist North East businesses (manufacturing and service sector) to adopt best practice to make their businesses more "agile" so that they can cope with

constant change and global changes. The project draws upon a variety of funds including ERDF, Regional Single Programme, Sub Regional Single Programme, SRB, and DTI-KTP.

The project has been developed with collaboration from a number of North East and global businesses.

IADET maintains satellites within 3 areas of the North East Region – Derwentside, Sedgfield, and the Tees Valley. Each of these satellites has one to two dedicated IADET Engineers who respond to the needs of that specific area and are able to draw down from the whole of IADET.

The tangible results of the project over the 1999-2005 period are, 272 companies assisted, 366 jobs created, 2921 jobs safeguarded and £29m in new turnover in companies.

As a more structured approach some of the initiatives have been joined up through local partnership in order to target the development of a specific sector. Both Teesside and Sunderland have been running a variety of initiatives to support the digital sector over a number of years. In both cases, support for research centre activity has been combined with training, entrepreneurship support and business networks. Similarly, as already described in an earlier case study Newcastle has been involved in a variety of projects to support the life sciences industry in the region.

#### **DigitalCity University of Teesside**

Since the mid-90s the University of Teesside has run projects focusing on many aspects of digital technologies - business applications of virtual Reality (including a major capital development), high-level training in digital technologies; creative and cultural programmes for both professional and community groups; support for creative & media start-ups through Graduate enterprise; development of the Northern Region Film & Television Archive; New Technology Institute; and most recently a Digital Knowledge Exchange working with business. These are now culminating in DigitalCity, a major initiative bringing R&D, business development (including inward investment), business generation and fellowship and learning programmes together under one umbrella, supported by a wide public-private partnership including Middlesbrough Council, Middlesbrough Town Centre Company, Tees Valley Partnership, ONE, Government Office for the North East, and private sector partners.

.DigitalCity is founded on three major capital & revenue developments:

A) The Institute of Digital Innovation [IDI], sited on the University campus and the basis for the generation of R&D-based digital media and digital technology applications; creative content; new business creation; and the supply of talented and entrepreneurial postgraduates.

B) The Creative Industries Quarter [CIQ] around Queen's Square in central Middlesbrough, a nexus of refurbished buildings that will house new and growing digital and creative companies, including those moving on from the IDI. In addition to accommodation, new, growing and relocating businesses will have ready access to a tailored, specialist business development services designed to help them get the best out of their skills, know-how and market opportunities. This strand of activity will be led by a designated Business Champion and have strong links to the revenue activities in the IDI. This element is sponsored by Middlesbrough Town Centre Company.

C) The Museum of Digital Media, planned for the Middlehaven development, a major tourist attractor for both Tees Valley and the region that will exploit the digital expertise and knowledge available in the University and in the growing cluster. This is conceived as a more populist initiative and is sponsored by Middlesbrough Council.

Project outcomes, founded on a strong track record of business and job creation, include 130 new businesses and 300 jobs by 2008. Results so far from start up activity have included 12

companies (one spinout), 28 new jobs, 1 new inward investment with 60 jobs, and the establishment of a business network (First Wednesday) with 50+ members.

Although the focus in this section has been on centres and structured activities, there are also many cases where research groups or individual researchers collaborate with local companies on one-off projects or develop a relationship that does not take the form of a major centre. The example of the medical innovation project below gives an illustration of how a relatively small project may evolve into wider collaboration and contribute to a major development.

#### **Commercialisation of Medical Innovations (CMI) - Northumbria University**

This was a tripartite collaboration whereby medical innovations from the NHS or University were taken towards the market place by University designers working with local manufacturing SMEs. The project involved substantial consultancy support to the companies, some of which was over a prolonged period and involved partnership and in-kind contributions from the Regional Medical Physics Department of the NHS, and the NHS Intellectual Property (IP) Hub based at the Regional Technology Centre, as well as the manufacturing SMEs who were the main beneficiaries.

Within the University, there was innovative collaboration between three Schools combining the knowledge of end-users (Health) with prototyping expertise (Engineering) and IP management, ergonomic, aesthetic and design for manufacture (Design). 25 SMEs were assisted of which 8 were major in-depth consultancies. Turnover of companies increased by over £5 million.

This project is part of a much wider contribution to the region from the School of Design. It was announced in June 05 that a Design Centre for the North would be established in Newcastle Gateshead as part of the Northern Way growth strategy across the three northern regions. Northumbria University will play a major part in this venture, which will receive an initial investment of £5m from Northern Way Growth Fund. The University will be working with partners in the private sector and with Gateshead Council.

### **Regional collaboration in advice to SMEs**

Each of the universities in the region has various mechanisms for managing consultancy and other links with SMEs. Some operate university consultancy companies, and levels of consultancy are reported via the national Higher Education, Business and Community Interaction Survey. There has however been a long term development of a collective approach to such work in the North East particularly.

Regional innovation issues and areas for potential collaboration are discussed through the Knowledge Transfer and Business and Enterprise Committees of Universities for the North East. This group comprises PVCs concerned with technology transfer/commercial services from each university and its remit includes reach out activities, Knowledge House, regional TCS collaboration, IP exploitation and spin out.

One of the specific projects to emerge from Higher Education Support for Industry in the North (HESIN) and carried forward into Universities for the North East, was Knowledge House (KH). The idea behind KH was that SMEs faced a range of barriers in accessing the knowledge resources of the universities which discouraged regional university/ SME collaboration.

KH was created in 1995 specifically to overcome these barriers, and to increase the amount of technology transfer taking place between local firms and universities. The purpose of the scheme was to create a structure which suited SMEs looking for help with a particular technical problem. The first barrier an SME faces in contacting a university in search of help

is the lack of knowledge of whom to contact. Therefore, KH offered the benefits of a single point of contact for all five universities, plus the NE branch of the Open University. KH can be accessed via a central node, based at the Regional Technology Centre in Sunderland, or any of the five university nodes. The initial enquiry would then be sent out to the relevant people at all of the five regional universities, inviting them to suggest academics that could address the identified need. Each university has a co-ordinator responsible for ensuring that the leads are disseminated to the correct contacts. Ideally KH will be able to offer the SME a choice of academic consultants and will facilitate a meeting for the firm's managers to meet with and select the most appropriate person for their needs.

Knowledge House has been funded through a series of phases, initially through the NE Region Objective 2 Structural Funds (ERDF) (£1,163,960 up to 2005), and more recently with funding from the HEFCE Higher Education Innovation Fund (£606,772 for 2004-5). This current HEIF funded phase runs from August 2004 to July 2006 and currently employs 13 FTE staff. This includes growth both at the central hub and in particular institutions – Newcastle now uses the Knowledge House team for all its consultancy contracts.

The project has contributed to regional development in broad terms through the provision of managed access to university expertise, facilities and services to the business community and as an agent for cultural change within the partner institutions, more specifically through the delivery of university outreach activities and interventions identified in national and regional business support programmes and initiatives.

In EU Structural Funds terms the following impacts have been identified for Knowledge House:

Gross new turnover	£14.74M
Gross safeguarded turnover	£5.34M
Gross new jobs	369 (Net = 265)
Gross safeguarded jobs	486 (Net = 355)
SME investment	£4.72M
Net new value added	£3.83M
Net safeguarded value added	£1.39M
Total equivalent value of impacts = £35.6M	

### ***Placements and labour based links***

A key element of knowledge transfer is through the interaction and learning that comes about from direct personal contact, often overlooked in discussions of research centres and technology transfer. Much of this activity is connected to the mainstream teaching activities and is reported in chapter 4, but there are other forms of placement and exchange of staff. Many of the schools and departments in the universities make extensive use of visiting professors and secondees from industry and commerce, and academic staff also take up secondee placements. There are however some constraints on this as a result of the pressures on higher education which have reduced the organisational slack that would allow for time away from direct teaching and research.

### **Knowledge Transfer Partnerships**

A key national programme which encourages mentoring between university and business is the Knowledge Transfer Partnership, formerly known as the Teaching Company Scheme. This programme is one of the longest running initiatives for knowledge transfer dating back to the 1970s. The region's universities engage in a considerable number of individual projects mainly with local SMEs (see annex for a list of recent projects). In each case the project

employs a graduate associate who works in the company on a strategic knowledge transfer project whilst being supervised by an academic from a university or other knowledge base organisation.

KTP projects tend to be quite significant in scale, usually 2 years, and are not always appropriate for the smaller firm which is looking for a shorter term project. In addition, they are restricted to specific industrial sectors, ruling out participation by a wide range of smaller companies. In response to this need One NorthEast is sponsoring its own KTP programme, covering regionally important sectors such as tourism, and is supporting a university scheme, Collaborative Innovation Partnerships (CIP), that provides a “ladder” to the more rigorous KTP for less experienced firms in the region. Projects tend to be 6-12 months long as opposed to two years, and have a higher level of subsidy, although the firm still has to make a major contribution. CIP began with ERDF support and has involved the universities of Teesside, Sunderland and Newcastle.

### ***Intellectual property, spin offs and science parks***

Support for the commercialisation of university technology in the region through patent licensing or through spin offs has been enhanced in recent years through a growth in the in-house commercialisation teams. In the case of Newcastle and Durham in particular this has been enhanced by the North East Centre for Scientific Enterprise, a collaborative project under the SEC programme (described earlier).

### **Science parks and incubators**

In 1986 the Mountjoy Research Centre was opened and formed the first phase of the Durham University Science Park. The Science Park is managed by the University through its wholly owned management company and tenants have access to many of the University’s resources including the library, internet connection and sports facilities. Mountjoy Research Park was initially established as an incubator building, but more recently has been expanded with new blocks developed with private capital. More recently Durham has also been involved in the NetPark (see case study below). Durham University is currently reorganising its property portfolio on the Science Site. Commercial tenants and University spin-out companies can be accommodated in Mountjoy Research Centre Block 4 and this accommodation is complemented by new incubator facilities at NetPark, the Science and Technology Park being developed in Sedgefield, County Durham, and which is conveniently located equidistant from the University’s two campuses

#### **NetPark (North East Technology Park), University of Durham**

NetPark is a major “R&D park” development located in County Durham. The park was initiated by Durham County Council; Sedgefield Borough Council; and One NorthEast in 2002, with funding from ERDF; Regional Single Programme; and the Sub Regional Single Programme. The first two buildings on NetPark are now complete. The first, the NetPark Research Institute, provides a home for two leading edge research groups from Durham, the Centre for Advanced Instrumentation (CfAI) and the Institute for Agility and Digital Enterprise Technology (IADET) (see separate case study). The CfAI uses adaptive optics techniques in the instrumentation packs it creates for large telescopes worldwide, in both the visual and infrared bands. The second building is the NetPark Incubator which provides office and laboratory space for new companies and technology-driven University spin outs. Three of the University’s spin-outs are now located in the Incubator.

Durham University’s relationship with NetPark comprises the Vice Chancellor and Deputy Vice Chancellor as members of the NetPark Advisory Steering Group, and a representative from the University Research and Economic Development Support Service who attends the NetPark Executive Board.



Newcastle has seen limited opportunities for the development of a science park, particularly as the two university campuses are hemmed in on the edge of the city centre. However, spin-offs have been established in a wide variety of existing commercial premises. One popular development which has seen at least three spin-offs was a converted Victorian brewery stables on the edge of Newcastle University campus. Currently there are proposals for various incubator facilities for spin offs and graduate start-ups both in the city centre and on a new business park near the city's airport.

In Newcastle, the International Centre for Life provides both managed workspace for potential biotechnology spin-out firms, as well as providing a home for the Human Genetics Institute of Newcastle University. The ICfL is a multi-activity centre located in the centre of Newcastle, and combining dedicated biotechnology incubator space, space for the Genetics research centre, and a visitor attraction to encourage greater public understanding (and acceptability) of biotechnology. The £50 million development was funded by a combination of National Lottery Millennium funding and ERDF.

### **Science City**

Newcastle City Council, One NorthEast, and Newcastle University are collaborating to use Newcastle's 'Science City' status to develop it as a world-class location for knowledge-based business, by building on the region's existing strengths in pioneering scientific research. The plans are a response to the Government's decision last year to designate Newcastle as a Science City – one of only six cities in the country earmarked for support to develop their science and technology facilities.

The three organisations leading the project have since formed the Newcastle Science City partnership, under the chairmanship of Paul Walker, Chief Executive of The Sage Group plc. The partnership has launched its programme of activity that will bring together researchers with companies to exploit commercial opportunities in applied science. The project will also develop collaborative activity from across the region, with other science and technology centres, including NaREC in Blyth; Netpark in Durham; The Wilton Centre in Redcar, Digital City in Middlesbrough and the University of Durham. The centrepiece of the project is 100,000 sq metres of new buildings with the working title of Science Central, accommodating new world-class scientific research, teaching and business facilities.

The University of Sunderland established the Industry Centre on Sunderland Enterprise Park in 1994 with support from City Challenge and European funding. The Centre was the University's 'one-stop shop' for interactions with businesses and public sector organisations requiring access to university expertise, training and facilities. As well as housing project teams delivering training and consultancy support to regional businesses it also hosted embryonic businesses aiming to spin-out over time as demonstrated by the AMSYS project that became AMSYS Rapid Prototyping Ltd.

The university now works in partnership with the North East Business Innovation Centre (NE-BIC) and City of Sunderland Council on Sunderland Science Park a series of complementary buildings supporting the growth of new companies. As part of the science park the university opened its St Peter's Gate incubator in 2004 since when it has seen 10 new companies created, 8 attracted to Sunderland, including 3 from outside of the region, and has seen the creation of 32 new jobs.

### **Spin off firms**

The North East does not have an external reputation for university spin-offs, although the performance has been respectable. Durham University's Mountjoy Research Centre and Science Park provides a base for both spin-off and spin-out companies, and since 1995 the University has spun-out 26 companies plus 2 joint ventures. The most successful of Durham's spin-offs is Bede Scientific, a Queens Award for Export Winner, and floated on the London Stock Exchange for £55 million

Newcastle has seen a number of successful spin offs in a range of technologies including sub-sea cable laying equipment (Soil Machine Dynamics), selectively bred fishing lures (Seabait) and a raft of platform and application software companies (including Interactive Learning, Claremont Controls and Quest). More recently there have been a number of biotechnology related spin offs such as Xcellsys and Orla Protein Technology.

#### Sage Group PLC

Although not strictly a spin off firm, Sage owes its origins in part to Newcastle University, and as such is the greatest success of the region's university initiated companies. One of the founders of Sage, Graham Wylie, was a Newcastle computing student who was engaged in a project with a local printing businessman David Goldman. As a result the two decided to set up a software business which has grown to be the most successful UK software company and the only one listed in the FT100.

Sage now employs around 1500 in Newcastle in a purpose built headquarters to the north of the city and has a global workforce of 8000.

The three post 1992 universities have only recently formalised policies to encourage spin off firms. Sunderland has had some success in developing businesses based on know-how for which there is market need and demand in the region rather than based on inventions and patents. One early such operation, developed during the initial 3 year phase of the Industry Centre, providing EMC testing services, was sold off to an international company. Sunderland's AMSYS rapid prototyping business went through a management buy-out in 1996 and traded profitably for 5 years until it was bought out by a regional competitor in 2001. The centre currently houses an ICT training and environmental training and consultancy business that were initially involved in delivering regionally subsidised training and consultancy during a pump-priming stage but subsequently developing a self-sustaining strategy based on a mix of commercially and publicly funded projects.

#### Regional Business Prize for Durham-based Company

A spin-out company led by Durham physicists has won the "Best Technology" award in the North East Business Awards 2005. The company, Durham Scientific Crystals Ltd., was formed in April 2003 to produce and market specialist semiconductor materials in a single crystal form, which are used in applications such as infra-red detectors, medical imaging and security screening, exploiting techniques developed at Durham's Physics Department since the mid-1990s. It is based at the NetPark Research Institute at Sedgefield. It has recently received a £1 million investment from Amphion Innovations Ltd.

## **Conclusion**

### **Successes in collaboration between regional stakeholders related to regional innovation**

The region can demonstrate real success in developing collaboration among the universities is support of regional innovation. With the formation of a university association back in 1983 to promote local industrial development, the North East has the longest collective commitment to this goal of any UK region. A series of projects and centres have followed, some such as Knowledge House being managed and initiated on a collective basis, others initiated by one university with inputs from some or all of the others. This is not to suggest however that universities have not continued to develop projects individually, or that this is not appropriate. However, there has been an acceptance that in some areas there is great advantage in a collaborative approach in order to pool resources, gain access to external funding and deliver a better service to the region's firms.

The strength of the collaboration among the universities can be contrasted with the limited possibilities for collaboration with other knowledge producers in the region. A characteristic

of the region is the absence of non-university HEIs and of public sector research organisations. The further education colleges, whilst having strong links with the universities around widening participation, have had little connection around research and technical support for industry. The roles of the two groups of institutions are quite distinct and the colleges have focused on providing support geared more to skills development and shop floor technical advice. However, the potential for stronger HE/FE working relationships in the field of knowledge transfer is now under active investigation.

The final area of collaboration we need to mention is with local business and the public sector. A number of the projects listed above have involved close collaboration with businesses, both as beneficiaries and as partners in providing support to other firms. With the public sector much of the collaboration has been around funding provision, although there has also been joint working through brokerage and identification of firms' needs. However it is fair to say that in contrast with some other countries the partnership is limited by the weakness of the regional public sector as a research performer.

One attempt to address this has been through the Strategy for Success which has looked to develop new R&D and exploitation intermediaries that can provide real collaborative partners for the universities. The new Centres of Excellence are varied in model, but some provide technical facilities which can be used by the universities in projects with industry, some are seeking to develop a significant technical staff base and could become a research partner, whilst all are looking to support exploitation through various forms of technology transfer and the provision of seed capital for new ventures.

### **Strengths, weaknesses, opportunities and threats related to regional innovation**

The following SWOT analysis emerged from discussions with regional agencies and private sector representatives during the project.

<p><b>Strengths</b></p> <p>There is a stated national / regional commitment to importance of research in economic development. Research at heart of RES through Strategy for Success.</p> <p>Diversity of research in regions universities. Acknowledged 'world leader' in some areas e.g. Life Sciences, Photovoltaics etc. Very wide range from blue sky to applied. Each HEI has its own USP which can be developed.</p> <p>In knowledge transfer there is a strong HEI infrastructure in place and a commitment / responsiveness to the need. Knowledge House very important.</p> <p>Messages for inward investors stronger now</p> <p>Teaching Company Scheme has worked well</p>	<p><b>Weaknesses</b></p> <p>Region too inward looking</p> <p>Low level of companies in the region with R &amp; D capability</p> <p>Communication channels within HE and externally not always effective</p> <p>Lack of critical mass as a region in R &amp; D makes it vulnerable to poaching</p> <p>Lack of private sector venture capital</p> <p>Reward mechanisms in HE need to be developed</p> <p>Slow decision making processes in HEI</p> <p>Short term versus long term results plays poorly to regional agenda</p> <p>Individual placements for undergraduates not working so well – lack of on-going support for undergraduate / company</p>
<p><b>Opportunities</b></p> <p>Northern Way and Strategy for Success etc may provide opportunities for greater</p>	<p><b>Threats</b></p> <p>Lack of consistency and purpose within the RDA has not led to a coherent policy in this</p>

<p>engagement and the building of critical mass</p> <p>Better linkages into Inward Investment activity could create new demand for R &amp; D and support potential investment</p> <p>Growth of start-up venture capital e.g. NSTAR</p> <p>Potential for research pooling</p> <p>Potential to exploit international links in research</p> <p>New Framework Programme</p> <p>Full economic costing should ensure university research is properly funded</p>	<p>area</p> <p>Transparency of funding</p> <p>Resources for teaching have fallen so funding for research is more limited.</p> <p>Full economic costing threatens some collaborations</p> <p>HE too protective on intellectual property rights</p> <p>RAE detracts from regional engagement.</p> <p>End of EU Structural Funds will threaten knowledge transfer activity</p> <p>Other regions focusing on the same research areas and some are ahead of North East.</p>
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## **CHAPTER IV: CONTRIBUTION OF TEACHING & LEARNING TO LABOUR MARKET AND SKILLS**

### ***Localising the learning process***

The quantity and quality of skilled labour make an important component influencing economic performance and productivity growth. Sianesi et al (2003) attributed tertiary education as being the most important level of education in respect of growth in OECD countries. Machin et al (2003) also found robust productivity effects from level 4 academic qualifications at both national and regional level. Employers benefit from graduates through a more productive and healthy workforce and highly skilled workers adapt more quickly to new tasks and technologies and are themselves a direct source of innovation (Blundell et al 1999). At plant level graduates are more productive as indicated by the higher wage premium they enjoy. It is therefore likely to follow that if one can increase the number of graduates employed in the region this should also increase its overall productivity and growth.

In terms of academic profile, the North East HEIs deliver largely the same product range as other regions but with slightly more provision in physical, biological, mathematical and computer sciences than the national average (HEFCE 2004 Regional Profiles North East). Around 34% of young students studying in the NE come from the NE, the highest proportion among the English regions, and most of these then seek employment in the region. However the NE is a net importer of students; this in part due to the low participation of school leavers in higher education in the region – at 24% the lowest in the UK.

A particular factor for the North East is the border with Scotland to the north. As Scotland has a different education system, without top-up fees for Scottish students, and a stronger tradition of local study, there are relatively few Scottish students willing to move to the North East for study. The implication is that the North East universities not only have a smaller local market due to the small size of the region, but one of their three neighbouring regions is largely closed to them.

All of the region's HEIs would to a greater or lesser extent, claim to draw upon the specific characteristics of the NE when making decisions about their academic portfolio. There is also evidence of academic/industrial liaison groups within HEIs who advise on curriculum content, placement provision etc although this is often subject and individual department driven. More detailed work on the match between academic programme provision and the long term regional employment requirements is now about to be carried out jointly by One NorthEast, HEFCE and the region's HEIs.

There are some specific drivers encouraging localisation of provision. Firstly the need for the research institutions (Durham and Newcastle) to meet their widening participation targets agreed with the new Office of Fair Access (OFFA) has meant they are much more actively addressing the potentially high performing student market in disadvantaged areas and groups within this region. Second, the most recent allocation of additional student numbers to HEIs by HEFCE had a strong regional dimension which includes evidence of widening participation, regionally relevant subject provision and employer need. Finally the new fee regime is likely to result in a more local HE student market. There is the likelihood of increased competition between HEIs for what may become a declining market, bringing with it the possibility that employability will become a more important criterion in student subject choice, including evidence of regional employment opportunities.

More specifically there are a number of courses within North East Universities which more explicitly meet regional needs. Teesside University offers a range of courses which have been designed in partnership to meet regional priorities, including foundation degrees in chemical technology with the Teesside Chemical Cluster and Centre of Excellence, Journalism alongside Newsquest, publishers of the Northern Echo, professions allied to medicine in particular operating practice and public health meeting the needs of a range of healthcare professionals in the area of public health and well being. At Teesside multimedia and digital media honours programmes are supporting the extensive regional digital cluster development. The digital sector has been targeted by ONE as being one of the key components of its development strategy for the region.

In general there is a growing capability within the higher and further education sector to support innovation and skills enhancement in the digital sector. This includes the New Technology Institutes tasked with enabling and promoting new information communications technology and other advanced technology learning opportunities. Within the North East region NTI South is acting as a regional capability for digital infrastructure provision, one of the region's Centres of Vocational Excellence (COVEs) has been designated a Centre of Vocational Excellence for Media – digital production and design. Teesside University is also a lead partner in the DigitalCity regeneration project funded by One NorthEast. The objective of the project is to generate and sustain a fast-growing, high-level economic base in digital technologies with a world-class reputation for creativity and innovation.

The NTI is now a regional entity as Tyne & Wear and Northumberland are in the process of merging with Tees Valley/Durham. While the latter has focused on digital media, the former has tackled broad ICT skills, including the embedding of vendor qualifications such as Microsoft and Cisco into academic programmes at college and university levels. This has been directly focused on meeting the needs of employers, who need the latest skills in using software products, but also need staff who have a wider range of transferable skills and knowledge provided by academic programmes.

The teaching portfolio at Northumbria is heavily focused on meeting the needs of the professions and so has a strong vocational bent. Such needs are typically articulated at national level through the professional bodies and over 20 professional and statutory bodies accredit programmes at the University in areas such as Accountancy, Building, Chemistry, Computing, Engineering, Marketing, Law, Personnel and Psychology. For example, the School of the Built Environment, which is one of the largest in the country, has teaching programmes accredited by RIBA, RICS and CIBSE amongst others. Regional labour market needs often reflect national issues so links with local employers are important, with some sponsoring students on construction courses and recruitment of students having a strong regional profile. In addition, the University is a leader in developing customised programmes for employers, which may be regional, national or international. Examples in the North East include Northumberland County Council, Northern Rock (a bank) and Procter & Gamble.

The School of Computing and Technology at the University of Sunderland has developed particularly strong links with the automotive engineering industry in the North East, with a range of collaborative programmes (Engineering Fellows, Graduate Retention in the Automotive Sector Project, Digital Factory) currently worth over £8 million. The School has partnerships with a number of automotive companies including Nissan Motor Manufacturing UK, Thyssenkrup Tallent Chassis, Magna Kanzei, Calsonic, TRW, Autrans. The University of Sunderland has also been closely involved in the creation of the National Glass Centre which is dedicated to the development and promotion of excellence in the art and industry of glass. The School of Arts, Design and Media has two workshops in the National Glass Centre which are both used for teaching undergraduate students. The Institute for International Research in glass is based at the National Glass Centre and aims to promote and facilitate research in glass by building on the rich heritage of glass making that began on Wearside in 674 AD, and on the academic activity that underpins research within the department.

The establishment of Foundation Degrees, New Technology Institutes and a number of successful regional CETLs (eg health and music) are all good examples of curriculum innovation geared to local and regional employment needs. The substantial Objective 2 ESF funded programmes in science, technology, business and computing, particularly delivered by Sunderland and Teesside universities proved very valuable in producing large numbers of highly skilled people both educated and employed in the region. This supply, however, is now under threat with the demise of Objective 2 funding.

### **Music Centre for Excellence in Teaching and Learning**

Newcastle University's International Centre for Music Studies and its partner applicants Durham, the OU, Teesside, Northumbria and Sunderland Universities have been successful in a bid to gain a new status as Centre for Excellence in Teaching and Learning. HEFCE funding to the tune of £4.5m will be used to train hundreds of future musicians using the very latest materials and methods and by forging stronger links between the region's universities and organisations like The Sage Gateshead.

Bidders had to demonstrate existing excellence in teaching and learning practices and how these would be developed further in order to attract the funding. The Centre for Excellence will receive £4.5m over the next five years, and £2m of that is intended for capital projects. The Centre will be 'virtual' in that it will have various outlets operating throughout the North East rather than one central site. Through the CETL for Inclusivity in Contemporary Musical Culture, music students will gain an enriched practical and academic learning experience of music as part of a pluralist culture – that is, encompassing world and early musics, classical and folk musics, rock and DJ scenes. This will build on existing collaboration between the six regional universities and the newly-opened £70m world-class facilities at The Sage Gateshead. Budding young student composers and performers will take part in workshops alongside some of the world's leading musicians. One project explores the potential of ensemble and communal music making as a model for student learning, while another prepares students for entering a competitive jobs market as self-employed musicians. At Newcastle University, new rehearsal rooms and sound studios will be built, and there will be an investment in new instruments, ranging from sitars, through Baroque instruments, to drum kits and electronic equipment. The music CETL provides a good example of partnership working with The Sage Gateshead, something which is encouraged in a new agreement between Newcastle University and the venue. This agreement outlines a mutual promise to work jointly on promoting music education, research and outreach. It will specifically include Newcastle folk music students using facilities at the venue and collaboration on event programming and other joint activities.

There is a very significant range of professional and managerial programmes particularly for the health education and other government services in all the universities. All have very close ties with relevant employers in the region through joint training programmes, student placements, joint and visiting staff appointments as well as strong graduate recruitment links.

### **The role of the careers service in the process of localising learning**

All the Careers Services have significant local and regional contacts across the public, private and voluntary sectors. Though traditionally focused on a national market, they are all increasingly developing a local orientation and engaging with local partnerships and agencies interested in promoting graduate employment with local employers. A number of these activities are directed towards 'growing the market' which involves helping/encouraging employers to understand the value of employing a graduate through direct employment, placements or through work experience. One such programme which has a range of regional partners is the Flexi-STEP programme.

Newcastle University, in partnership with One NorthEast and ENTRUST has piloted a new FlexiStep term time programme which aims to bring commercial benefits to SMEs. Flexi-Step extends the popular Shell Technology Enterprise Programme (STEP) by placing

undergraduate students in SMEs to address specific business development issues. Flexi-Step runs during term-time with each student expected to assign 120 hours of consultancy alongside their academic commitments. Students receive an hourly rate of £5.50 of which sixty percent is subsidized by the programme sponsors. Students are selected and supported by a University mentor and given access to a business adviser at the University's Enterprise Centre. Due to the success of the pilot, this programme will be rolled out across the North East to involve the Universities of Northumbria, Durham and Teesside.

Careers Services are also involved in raising awareness amongst students and alumni of the various opportunities available in local and regional companies. The Newcastle University Careers Service run a series of events called 'Breaking into ....' which aims to provide information on how to break into careers across a number of different sectors with first hand accounts from graduates and employers. However, it is common, given the nature of their work which is predominantly advice and guidance to individual students, for Careers Offices to be located with Student Services within the university, rather than with ILOs who often have stronger links with the local business community and often excellent knowledge of local labour markets. Although there are examples of close working between these departments, opportunities could be further developed. Local labour market information collected by government and the business community is held by all careers offices and is often distributed to departments and facilities.

## ***Student integration into the region***

### **Placements**

Placements are an important mechanism through which students can acquire employability skills and build links with regional employers. It is uncommon for placements to be co-ordinated centrally within the university and organisation usually takes place at the level of the individual school or department. At Teesside University the largest school in the University is the School of Health & Social Care and its students undertake placement work throughout hospitals in the region. Likewise at the School of Health, Community and Education Studies at Northumbria University the Practice Placements team are responsible for the management of placement activity for each profession taught within the School, this includes Nursing and Midwifery, Primary and Secondary Education, Social Work, Occupational Therapy and Physiotherapy. In total the team organise and support approximately 8000 student placements every year. A range of both undergraduate and postgraduate degrees across all the universities within the North East include an optional or compulsory placement some of which will be carried out with regional employers. The Business Accounting and Finance degree programme at Newcastle is based on a partnership between the University, PricewaterhouseCoopers LLP and the Institute of Chartered Accountants in England and Wales. It combines the study of business, accounting and finance with paid work placements at PwC. Degrees in Environmental Science at Newcastle offer the possibility of a work placement year, in an organization that has particular conservational strengths (RSPB, the Environmental Agency, Wildlife Trusts). At the School of Computing and Technology at Sunderland University students acquire essential industrial experience through placement programmes offered across a range of degree programmes. Placements are organised through the department's Placement Unit, normally last 48 weeks and placement companies vary from small local firms to large international companies. Several of the Biological and Biomedical Sciences degrees at Durham University incorporate a one-year industrial placement which enables students to acquire vocational experience in a workplace setting. Students who have taken the placement year have gained experience within regional, national and international establishments. Some have spent time in the research and development units of major pharmaceutical companies, others have spent time pursuing research in research laboratories and several have worked in NHS laboratories, gaining professional experience. The School of Engineering at Durham also has extensive links with



the Year in Industry programme - a scheme which provides the opportunity for students to undertake work experience in an engineering company for a full year before starting an undergraduate course.

The student body is a significant contributor to community activity within the region through volunteering. A growing interface between the university and the community is the Students Union, which although it mainly exists to provide welfare services specifically for students, is often a significant 'provider' and 'facilitator' of community related activity.

## **Postgraduate activity meeting regional needs**

Across universities there is evidence of postgraduate activity geared towards meeting regional needs – for example in some taught courses the dissertation element needs to be based on a practical problem solving scenario and regional companies are often involved in this activity. In terms of research students there are often extensive links with regional companies. Often in subjects like teaching and communication, placements and practical fieldwork make up a substantial proportion of the courses in this subject.

Newcastle University offers a range of degree courses at Masters level which are directly tailored to the requirements of industry. A number of these courses are funded through the EPSRC's Collaborative Training Account and offers the student the opportunity to undertake a training programme which combines experience of the academic environment with that of a user organisation - in industry, commerce, and the public and service sectors. There is also scope for the user community to influence and contribute to course development and delivery. One example of recently launched programme was the MSc in Pipeline Engineering, developed in collaboration with a cluster of local pipeline technology firms.

## ***Student Recruitment and Regional Employment***

### **Student Recruitment**

Universities within the North East recruit locally, regionally, nationally and internationally, although increasingly the North East student population is changing as greater numbers of students choose to study at a local or regional institution, rather than to move away to study in other regions of the UK. The number of North East origin students studying at North East institutions increased by 17% from 7,560 in 1997/98 to 8,850 in 2002/03 and the number of NE origin students leaving the region to study decreased by 9% from 4,915 in 1997/98 to 4,460 in 2002/03 (changes refer to fulltime undergraduate, first year students). A similar pattern is found in other regions which has subsequently led to a relative decline in the number of people from other regions of the UK coming to the North East to study. If the number of incoming students continues to decline one of the main ways of maintaining student numbers in the region will be through widening participation activity and the targeting of international students.

The region's universities are highly integrated into the regional education supply chain. The low proportion of young people entering higher education, just over half the national average, resulted in a collective approach to addressing this problem through Aimhigher and other activities under the auspices of Universities for the North East. HEFCE widening participation special funding has been used by HEIs working with schools and colleges across the region and in individual institutions on four generic themes: raising aspirations, pre-entry activities, curriculum development and student retention/progression. All the universities are actively involved in widening participation, and departments and faculties organise open days to raise regional aspirations for higher education and increase the numbers of local children advancing into higher education. Again, there is a particular North Eastern dimension to this, in the flexibility of the universities to respond to particular local needs. One of the consequences of a long history of working in this area and of having a mission that is strongly influenced by access and equality of opportunity is that Sunderland, Teesside and

Northumbria perform well above national benchmarks in recruiting students from low participation neighbourhoods with Sunderland and Teesside regularly appearing within the five best performing institutions in the country on this measure.

In terms of recruitment into the region, recent analysis has shown that students that migrate are likely to be highly qualified and from more affluent postcodes. Given the importance the region attributes to addressing the issue of population decline it would be unfortunate if pressure on Durham and Newcastle in particular to widen participation, produces greater competition between universities within the region at the expense of attracting talent to the region from outside.

The region has also seen significant growth in overseas students in recent years, and whilst seen as a source of revenue and increased diversity on campuses, the region is currently taking a greater interest in the implications for economic development. In the recent Northern Way discussions partners in the Tyne and Wear city-region in particular have identified overseas students as a key element of talent attraction and have taken a keen interest in the change in policy for Scotland only to allow overseas students to stay on for two years after graduation to gain work experience.

Access to HE in the region is also facilitated by the regional HEI Partnerships with schools and colleges such as the Universities of Teesside and Sunderland FE Partnerships and Northumbria FE Franchise Network which are all actively trying to increase and manage regional recruitment and encourage young people into higher education. School liaison initiatives such as Teesside's METEOR programme with primary-age children, place a strong focus on raising aspirations and attainment. Just over six thousand students study on HE courses in FE colleges and many of these institutions are linked into the regional universities. More recently HEI and FE partners have responded to a national call by HEFCE to establish a pan-regional Lifelong Learning Network. This will forge new relationships between employers, producers and learners to increase both demand and capacity in higher education. It seeks to achieve a step change in activity and coherence by building on Aimhigher and existing HE/ FE sub-regional networks, developing the use of technology to enhance guidance and delivery, the establishment of a vocational HE framework and the mapping of progress in routes from vocational to non vocational awards, new credit based systems to facilitate progression and strengthening employer engagement.

## **The North East's Colleges – Giving Wider Access to Higher Education**

The North East's network of 22 colleges is at the heart of the Region's economic regeneration and social inclusion strategies. The colleges range in size from the city colleges of Newcastle and Sunderland, among the 20 largest colleges in the UK, to smaller specialist colleges designed to meet the needs of 16-18 year-olds or the strategically important creative and land-based industrial sectors.

Colleges are not just community resources; they are important enterprises in their own rights. The 22 colleges have a combined turnover of more than £275m and employ over 8,000 North East residents. Yet their most crucial contribution to the North East is the impact they have on the economic and social structure on which the future prosperity of the Region depends.

More than a quarter of a million North East residents attend a further education college every year, generating half a million course enrolments. To put this in context, every second young person aged 16-18 and one in seven adults of working age attend a college in any given year. The colleges offer around 4,000 separate qualifications from basic literacy and numeracy to degree level study, and North East residents can access college provision in over 300 formal learning centres. (This figure expands to more than 2,000 once community venues and workplace learning centres are taken into account.)

Colleges are also vital resources for the North East's business community, helping to increase the Region's skill base and raise productivity levels. Employers sponsor over 41,000 enrolments each year on training courses at the colleges, which equated to 1.7m hours of guided learning in 2003/04. There are currently 19 Centres of Vocational Excellence (CoVEs) in the Region involving colleges, delivering high quality training and business support in vital economic sectors, including ICT Networking, Aerospace, Nautical Engineering, Logistics, Digital Media, Construction, Manufacturing, Tourism, Childcare, Customer Skills and Performing Arts. In addition, almost 5,000 young people undertake Apprenticeships in the North East colleges.

## **College Provision of Higher Education**

Nationally, colleges provide 40% of home entrants to higher education and deliver 11% of higher education learning. Around 11,000 North East residents study higher education courses at a college each year, based on a combination of directly provided courses and partnership arrangements with universities and HE institutions. 15 North East colleges offer Foundation Degrees, within 17 broad subject areas and 115 different course titles – in all the network of North East colleges offers 198 different college/subject combinations for Foundation Degrees. 5,000 North East adults each year are enrolled on special Access to Higher Education courses, including many with no previous formal qualifications. The colleges had more than 3,000 enrolments on HNDs/HNCs in 2003/04, providing higher vocational learning in areas like Business Administration, Health and Engineering. Colleges are actively involved in the Region's Aimhigher partnerships, which aim to encourage young people with little or no family background of higher level study to progress to university. 16-18 year-olds achieved over 33,000 Level 3 qualifications at the North East colleges in 2003/04 (38% of which were achieved by young people from areas of relative deprivation). More than 16,000 Level 3 qualifications were achieved by adults, 44% of whom came from areas of relative deprivation.

Newcastle College is the second largest provider of HE in an FE in the UK. It offers an extensive range of courses including, more than 40 foundation degrees, honours degrees and teacher training courses. Courses vary from an HNC in Manufacturing, Engineering or Photography to an HND in Business, a Foundation Degree in Tourism or an Honours degree in Fine Art and many others. In September 2005 the Music Academy will be introducing a Foundation Degree in Popular Music and a Foundation degree in Music Production, validated by Newcastle University. The courses have been devised with some of the UK's major music producers and record companies. John Ravenhall, an independent producer (who has worked with celebrities including Sir Cliff Richard) and Demolition Records (a local independent record label) are amongst several experts who have advised on the structure and content of the Degrees.

New College Durham has offered courses of higher education for many years. Foundation Degrees and Higher National awards are offered in a wide range of subjects to both full and part time students. The qualifications offered are designed in consultation with employers and respond to their needs for highly skilled flexible staff. A number of curriculum areas of particular relevance to regional skills priorities include Tourism, High Skill Automotive Technicians, Public Services and Complimentary Therapies. In addition to sub-degree awards, the college also offers several Final Honours degrees in subjects as diverse as Podiatry, Nursing, Social Work and Business Management. Although most of the college's higher education graduates go on to follow their careers with companies and public sector bodies in the region, the college is successful in attracting an increasing number of students from abroad to its degree programmes.

Cleveland College of Art & Design is one of only 4 Specialist Art and Design colleges in the country and the only one in the North East. It has a long history of providing Higher Education and has developed a portfolio of programmes in response to developments in the creative industries regionally, nationally and internationally and to provide a comprehensive

matrix of progression to widen participation in Higher Education in the Tees Valley. Currently there are five undergraduate degrees BA (Hons) Fine Art, Design Crafts for the Entertainment Industries, Photography, Fashion Enterprise and Textiles and Surface Design) delivered on a full and part-time basis, validated by the University of Teesside. Two of these honours degrees are indirectly funded through the University, but all aspects of programme planning, resourcing and delivery are undertaken by the college. Two Foundation Degrees have been successfully established in Graphic Design and TV and Film Production, and a recent QAA Foundation Degree Review noted good practice in the close interface with industry and employers. The College is currently working closely with three Sector Skills Councils, Skillset, Skillfast, and Creative and Cultural Skills to develop additional foundation degrees. Additional student numbers have been provided to introduce two new foundation degrees, Fashion Production and Applied Arts for 2006.

## The North East Graduate Labour Market

Graduate labour market information has been compiled for a number of years using mainly Higher Education Statistics Agency and Higher Education Funding Council data sometimes supplemented by surveys of North East employers. The objective of these projects has been to improve the content and use of graduate labour market intelligence within the North East through regional collaboration and partnership amongst universities and a number of other regional partners including the Regional Development Agency, Government Office, Small Business Service, Sector Skills Development Agency and Association of Colleges. Although the HESA data has been heavily criticised for relating to a period only six months after graduation when many graduates have not found permanent employment, it does give some insights into North East graduate destinations. The most recent report entitled 'Graduates and the North East (2005)' was commissioned by One NorthEast and addressed a key set of questions:

- Where does the North East's undergraduate and postgraduate population originate from, and what patterns are there?
- What are the patterns of study in the region?
- What happens to North East's graduates after they leave their higher education (HE) course, and what patterns are there?

The following broad findings concerning the flow of graduates into the labour market emerged from the study.

61% of new graduates from North East universities entered employment, 11% went into work and study, with 17% going on to further full time study (HEFCE First Destination returns).

The **number of graduates entering the North East workforce has increased**, as has the proportion of graduates entering the NE workforce who either studied in, or came from, the NE.

Forty-five percent of the graduates of North East HEIs entering employment in 2000/01 were employed within the region. This compares with London where 70% of graduates from London's universities were employed in London. But in East Midlands for example only a third of graduates from universities in the East Midlands were employed within the East Midland region.

The **number of graduates entering graduate level jobs in the NE has increased**. The level of under-employment for NE graduates has remained broadly constant and is lower than the national average.

There has been a **significant increase in the proportion of graduates entering public/community sector jobs in the NE** at six months after graduation, with a decrease in entry to other sectors, particularly manufacturing, retail, transport & communications and the hospitality sector.

**The proportion of North East origin graduates entering work in the North East has risen** whilst there has been a fall in the proportion entering work in London and the South East.

Overall the region is providing a level of graduate employment sufficient to take up the increased supply of graduates. Stay at home graduates and graduates that had been attracted to study in the region are most likely to be in graduate level jobs at six months, with graduates returning to the North East less likely to quickly secure graduate level employment.

Source: Graduates and the North East (2005) Prepared and published by the KSA Partnership.

There has been a prevalent view in the North East that there is an over production of graduates given regional demand. Yet only 26% of all workers in the North East hold an HE qualification – the lowest in the country (LFS spring 2004). Currently under 5% of the NE graduate workforce is unemployed. The Labour Force Survey (LFS) has also shown that once regional differences in price levels are accounted for there is only a very small difference between the earnings of graduates in the North East and London. In terms of skills shortages the Employer Skills survey estimates that a quarter of all vacancies are for higher level skills and this is approximately the same in all regions. One of the major challenges in the North East is to encourage the private sector, particularly in manufacturing to increase their demand for graduate employees. Whereas most of the larger firms have established HR departments and have a history of graduate employment there is a major issue with engaging the SME sector. In order to address this concern more detailed and important work is now being done by the Sector Skills Councils which should better inform both individuals and institutions about demands for skills over a longer period, broken down by sector and region. The Enterprise in the Curriculum programme which started in the late 1990s encouraged HEIs to work closely with employers and to actively build generic employability skills into their curricula. More recently issues such as innovation, creativity and entrepreneurship have influenced both curriculum content and delivery.

## **Pathways between regional HEIs and regional firms**

Given the high proportion of SMEs in the region, considerable energy has been expended by the HEIs to make links with them. Their representative organisations, particularly the Federation of Small Businesses and the Chamber of Commerce, have argued vociferously that the need is for more young people to enter the labour market at Level 2 and 3 rather than after higher education, and they have also argued against the Government's 50% participation target. Despite this, HEIs across the region have managed to establish very successful relationships with a number of regional businesses and there are a number of aspects to this relationship. These include industrial partnerships (Shell Technology and Enterprise Programme, Co-operative Awards in Science and Engineering, Knowledge Transfer Partnerships formerly Teaching Company Scheme), technology transfer, spin-off activities, business consultancy, the employment of graduates and the participation of small businesses in university run continuing professional development activities and work based learning. Graduate retention activities also serve to create pathways between regional HEIs and regional firms and a significant amount of activity within regional HEIs involves working with local employers, especially SMEs for purposes of identifying placement/work experience opportunities. Importantly there is a relatively high conversion into jobs at the end of such projects.

## ***Graduate Enterprise***

Over the last five years graduate self employment has become a more important activity within universities and is seen as one way of increasing business start-up activity within the region. In 2001-02, those entering self-employment within six months of graduation stood at approximately 1.5% against a national statistic of 3.1% (MacNamara, 2002) a figure which mirrors regional discrepancies in small firm formation rates more generally within the UK.

All universities within the North East have developed significant Graduate Enterprise and Entrepreneurship Programmes and increasingly this function has been devolved to a separate unit to support this work whereas formerly this activity was part of the Careers Service. These programmes seek to provide individuals with practical information, advice, training and support (including in some cases the establishment of on and off campus ‘hatcheries’ and incubators) appropriate to business start-up. In most cases, participants are also assigned a mentor who is able to assist with advice and support, drawing upon their own experience in business. Projects also help the graduate entrepreneurs in terms of accessing relevant professional services and support as well as network contacts. The schemes often facilitate access to these professional services – legal advice, accountancy – free of charge for limited periods. A new national Council for Graduate Entrepreneurship has just been established by the Government.

Alongside these activities and recognising the need to raise levels of enterprise or entrepreneurship more generally, universities are increasingly engaged in offering modules and course programmes designed to facilitate new business start-ups. Education for enterprise aims to produce graduates who are ‘capable of being innovative, can recognise and create opportunities, take risks, make decisions, analyse and solve problems and communicate their feelings clearly and effectively.’

#### **UPGRADE<sup>2</sup> – Teesside University**

Helps graduates from any university or degree discipline to set up new businesses in fields ranging from animation and computer games development to interior design and music. So far, 70 new companies have been nurtured through the scheme, creating 150 jobs since its launch in 2000. The businesses are linked to a network of advisers who provide mentoring and support. Several of these businesses have won awards at regional and national levels.

UPGRADE<sup>2</sup> provides new businesses with subsidised office space for the first year as well as a PC, internet access, phone line and office furniture. It also supplies business advice and guidance from the initial idea through to business start-up and beyond, a business mentor, free workshops, access to a structured programme of business support and will connect to regional business support agencies and sources of funding.

#### **The Hatchery at Sunderland**

The Hatchery at the University of Sunderland is part of the University’s enterprise and employability strand and aims to encourage Sunderland University students to be more enterprising in their outlook and to consider self employment as a viable career option. The Hatchery offers members who have had their proposals approved - advice and support of an academic and business mentor for a period of 12 months; the opportunity to meet representatives from enterprise organisations; use of web facilities; access to resources; monitoring and progression including an exit interview. The Hatchery also offers a range of enterprise courses to University of Sunderland students, staff and alumni designed to equip participants with the skills and knowledge to run a business, courses can be credit bearing. A number of degrees also have enterprise modules attached. Sunderland Business School deliver in partnership with the Business and Innovation Centre deliver a national programme called New Entrepreneur Scholarships. These are open to people over the age of 18 who are not in full-time education, resident in designated disadvantaged areas in Sunderland and in addition demonstrate some other disadvantage, i.e long-term unemployed, disabled, single parent.

#### **Graduate Enterprise and Entrepreneurship at Durham University**

Durham University offer a portfolio of activities aimed at encouraging graduate enterprise and entrepreneurship. These include the Enterprise Exchange Programme which introduces undergraduates to different elements of starting a business, the Graduate Learning of Entrepreneurship Accelerated through Mentoring Programme which delivers enterprise awareness and training sessions, assists with business planning and helps graduates to start

their own business. Durham Business School also undertake delivery of enterprise modules in departments across the university.

### **Newcastle University Enterprise Centre**

Newcastle University operates an Enterprise Centre dedicated to equipping all its graduates with the necessary skills and confidence to make any business successful, either for the company they work for, or their own graduate businesses.

The Centre also gets involved with bringing work-related learning and employability skills into the curriculum, with specially designed modules such as Business Enterprise. This ensures valuable skills and experience are accessible to all students at Newcastle, including non-business subjects and postgraduate students.

At present funding for this work is hard to access and with the demise of EU Structural funds this work is very much at risk in the NE. Discussions are currently taking place with the regional stakeholders on this issue of future funding of graduate enterprise. Although graduate retention and the attraction back of alumni features highly in strategic planning documentation including the new RES, there is as yet little coordinated activity on the ground to make it happen beyond small scale projects, examples of which have been described earlier.

## ***Promoting lifelong learning, continuing professional development and training***

### **Lifelong learning**

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. Lifelong Learning is directed at employment, career opportunities and continuing professional development for both employed and unemployed. This includes updating or re-training to acquire or extend knowledge and skills or qualifications for new roles. Access is fundamental to Lifelong Learning; this includes flexible funding for courses, variable and flexible entry requirements, acceptance of life experience as a qualification, wider social inclusion and hours to suit students who are employed or unemployed.

The pattern of development of lifelong and work based learning over the past ten years has been one of capacity building within universities, working in partnership with key public bodies such as the RDA, Sector Skills Councils and employers themselves. All the universities are increasingly playing a regional role in meeting professional and vocational education demands through a number of activities. At Teesside the Centre for Lifelong Learning offers continuing education and professional development courses through the Negotiated Learning Programme, Learn to Return Project and the Accreditation for Pathways of Excellence (APEX). Learners are encouraged to engage with higher education through short accredited courses (at work or in the community) and the degree programme offered within the Negotiated Learning Programme. An integral part of the NLP is the opportunity for employed learners to develop their learning and continue their education whilst developing their role at work, thus aiding and encouraging professional development. The APEX accredits company in-house training, applying higher education credit to employee learning and professional development. APEX accredits company in-house training, applying higher education credit to employee learning and professional development.

## **Learn2Return**

Learn2Return is a Teesside project part-financed by the European Social Fund and has supported adults by providing learning opportunities and information, advice and guidance to learners in community venues. A wide range of courses is offered including 'surviving your new job', 'returning to study', 'women's enterprise and learning in computing'. By offering small bites of learning initially in a local setting, the Community Learning Team build capacity and the confidence of learners and support them in their progression to study part time or full time at university if they so choose. The team operate a 'Find Out More Day' programme for subject disciplines on a rolling programme. Full and part time learners are also supported through the informed decision making process by staff of the University's Course Information Centre, who visit community centres and also hold afternoon surgeries for individual appointments. The activity makes a difference by offering small bites of learning delivered locally; offering a range of skills based modules to boost confidence; support learners through offering progression; provide information, advice and guidance to support informed decision making.

The Centre for Lifelong Learning at Newcastle is managed in partnership between Newcastle University and Sunderland University. The partnership draws on the strengths of both universities building on the University of Sunderland's nationally recognised success in encouraging more people to get involved in higher education throughout their life and the long established provision of high quality short courses through the Centre for Lifelong Learning in Newcastle. The Centre provides adult education courses for the general public in a range of subjects including archaeology, art, astronomy, biology, ecology, English and European languages and literature, geology, history, music, philosophy and religious studies. Most courses are accredited enabling students to accumulate credits and be awarded the Higher Education Certificate. The majority of courses take place in the evening but many are held in the daytime or at weekends, and both week-long and weekend residential courses are arranged depending on the course. The Durham University Language Centre runs many different foreign language courses both for University students, staff and members of the public through their Languages for All programme. Students' learning is supported by open access facilities with a wide range of language learning materials including books, audio tapes, CDs, videos, DVDs, satellite television, computer programmes and web access. The Language Centre also offers a range of business programmes including courses on Negotiating Skills, Business Presentations, Language for Meetings and Telephone Skills.

Sunderland also made a very significant national contribution to lifelong learning policy through its sponsorship of the pilot of the University for Industry, a project taken up by a national organisation subsequently. In the latter stages of the pilot activities Sunderland coordinated the regional partnership Learning North East which embraced a wide range of regional partners including other universities, FE colleges, training agencies and providers, the NHS, private sector bodies and community organisations. Learning North East encouraged thousands of learners to take up bite-sized learning opportunities and full courses and facilitated learning in hundreds of SMEs, before its ESF funding ended.

## **Work Based Learning**

New technology and increased national and global competition often demand changing work practices and the development of workforce skills. Training is one of the principal means for advanced economies to maintain their position within the global economy and many companies have been eager to embrace work based learning as an important component of a 'learning organisation'. The role of universities in meeting the high level skill needs of employers has received increasing attention from government since the late 90s through various White Papers, coupled with the general stimulation of third mission activities in the HE sector. Universities within the North East have responded to this debate although it is central to the core mission of individual universities to a greater or lesser extent. At Teesside, for example, a strong lead has been taken in the development of employer-oriented



foundation degrees, in the delivery of a co-ordinated programme with the FE Partnership Colleges. The Executive Education and Enterprise Programme at Durham University Business School offers management and organisational development initiatives to a wide range of regional, national and international clients. A wide range of bespoke and open programmes are delivered aimed at enabling senior managers and directors to become more effective leaders, to learn to develop strategic approaches within their companies, to be more reflective. Organisations are offered support through the Business School's electronic teaching and learning platform.

Work related learning is a strong strategic priority for Northumbria University at both a sub-regional and regional level, often undertaken in conjunction with Newcastle and Sunderland University. The University has taken a leading role in developing the frameworks and pilot projects for both flexible accreditation and flexible delivery of customised learning programmes for employers. Increasingly, employers are demanding smaller, customised packages of learning and delivery in a format which is convenient to the employer and employee, rather than 'off the shelf' degree programmes or more conventional short courses. Initial funding from the Dept of Education in 1997 enabled Northumbria to lead a regional project with partner universities to work with a small, but representative sample of public and private sector employers to see how HE could become more flexible to meet their learning needs. The main outcome was the design of generic Lifelong Learning Awards at anything from first year undergraduate (level 4) to postgraduate (level 7) level, which was later validated by all five universities. This was implemented amongst regional employers with two projects supported by the European Social Fund in 1999/00 and 2000/02 the second of which was in collaboration with the other regional HEIs. The work was taken forward by Northumbria at the sub-regional level in a series of projects developing the work-related learning theme with Newcastle and Sunderland Universities. This has secured £826K in grant income from the Tyne & Wear Partnership from 2000 – 2006 and will have delivered a total of more than 688 learners when completed. As the quality assurance mechanisms and links with employers developed at Northumbria, an even more flexible model evolved so that corporate learning, ie. customised for individual employers, started to become embedded as part of mainstream teaching and has brought in over £2.5m income in 2004/05 from clients in the North East and in Europe and Russia.

### **Access to learning from under-represented groups**

Higher education institutions are moving away from traditional forms of course delivery and the standard three-year bachelor degree in order to provide flexible higher education provision to a variety of audiences. This includes offering alternative and innovative ways of accessing higher education by underrepresented groups. This follows on from an explicit policy target set by government that by the year 2010, 50 per cent of those aged between 18 and 30 should have the opportunity of benefiting from higher education but with an added emphasis upon those students from particular social groups, from disadvantaged localities, students with disabilities and students with few prior qualifications. To help meet this target, the North East Partnership (which involves all 22 Further Education Colleges and 6 Higher Education Institutions) is working together in a number of regional and sub-regional initiatives to raise the aspirations of young people in the North East towards higher education, especially those who may not previously have thought it an option for them.

The partnership seeks to target the following principal groups:

- Young people who attend schools and colleges with low attainment in areas of low participation
- The vocationally gifted and talented, including those on vocational programmes and those in employment
- People aged 18-30 who are not currently engaged in formal learning
- Key intermediaries such as parents, advisers, carers, employers and teachers

## **Widening Participation Projects**

The University of Durham's Student Targeted Aspiration Raising Scheme - STARS - is a scheme that aims to raise the aspiration of young people in the north east and encourage progression into higher education. STARS supports students through their studies from Year 9 onwards by providing study skills workshops and university visits. The scheme is available free to all state-funded schools and colleges in the north east. The STARS programme for 2005/06 has a range of innovative sessions designed to encourage students to aim higher. These include sessions aimed at dispelling the myth that university is for a certain type of person, at providing helpful hints and tips on exam revision and providing an introduction to managing money and the kinds of financial support available to students. Four thousand state school students attended Durham University STARS sessions in 2004-05

The Bright Sparks club is part of the University of Sunderland's Passport to Higher Education initiative, which comprises a range of activities for school pupils designed to encourage them to progress into university. Bright Sparks encourages primary and secondary schools students to take an active interest in and demand for Science and Technology, while breaking down the barriers to further and higher education. Through collaboration with local companies, industries and academic staff, students from local schools (the 15 primary and 10 secondary schools within Sunderland) are invited to involve their students whether as a school initiative, or an individual opportunity through a monthly Saturday club to subscribe to some or all of the following activities: Science Taster Activities, Saturday Club, Science and Technology Themed Visits. All activities are "national curriculum compliant" but also promote further or higher education through breaking down the perceived barriers to higher education.

## **Foundation degrees**

In order to improve FE/HE progression a number of universities in the North East have entered into partnership with regional FE colleges to create and validate a range of Foundation Degrees that will give students exposure to higher education and the opportunity to progress to University in order to complete their undergraduate studies. Foundation Degrees aim to integrate academic and work based learning through close collaboration between employers, universities and colleges of Further Education. Foundation Degree students can either study full-time over two years or on a part-time basis, allowing them to undertake Higher Education while in work. The intention is to deliver Foundation Degrees at employer premises, Higher and Further Education colleges and universities as well as through distance and electronic modes of learning.

## ***Changing forms of educational provision***

Developments in telecommunications networks are challenging the role of the place-based institution in the production, preservation and transmission of knowledge. Developments in ICTs enable higher education institutions to respond to educational needs in a number of innovative and radical ways. All of the universities in the North East have now implemented a Managed Learning Environment (Blackboard or WebCT) to provide a platform for e-supported learning and e-delivered learning, both on campus and increasingly to postgraduate and post-experience students studying at a distance. This e-learning environment hosts module support information, learning materials, links to websites and on-line journals and is accessible via the internet. Northumbria University has established a wholly-owned subsidiary company, called Northumbria Learning, to deliver a range of services to educational and commercial markets. These include flexible e-learning solutions, web applications and learning assessment management tools such as anti-plagiarism software. Northumbria Learning has been an Application Services Provider for Blackboard and supported a number of other organisations with this learning platform. At Newcastle University blackboard has also been utilised to support distance learning and hosts the recently established web-based MSc in Clinical Oncology and Palliative Care which includes access to web-based resources, discussion boards and e-mail support with module leaders.

Northumbria University offer a wide range of courses that can be studied on a distance learning basis including a number of professional courses particularly related to law, as well as computing, cultural management, advanced microelectronics where students link via the internet to electronic computer aided design packages running on work stations to gain skills in the use of industry standard software. The format of materials is mainly mixed mode. A workbook directs students to read particular parts and has self-test questions as well as case studies. Access to databases backs this up. There are also supplementary materials.

Teesside University provides flexible learning opportunities through offering 'small bites of learning' in localised centres across the Tees Valley. Over 4,000 part time learners have been engaged in this type of provision in the last academic year. Through the network of partners, sub-degree provision is offered in some FE centres. Through the work of the Open Learning Unit some distance learning provision is offered. By operating a credit accumulation and transfer scheme the University of Sunderland are able to offer a customised modular scheme which enables students to tailor make their own programme of study from certificate to degree level qualifications.

### ***Enhancing the regional learning system***

Despite the strong nationally focused learning system, all the regional universities do acknowledge the need to develop educational opportunity at HE level on a regional basis. The academic profiling work described earlier combined with better regional data from HESA, regional LMI and the new work now being done by the Sector Skills Councils are all helping institutions to better understand the need for different types of HE product within the region and to inform academic decision making.

Regional academic collaboration between the HEIs is facilitated by the Universities for the North East Board, Executive and in particular its Academic Development Committee (ADC) made up of Academic PVC/DVCs from all the institutions which advise on academic issues. Universities for the North East also regularly invites other national (e.g. HEFCE) and regional stakeholders to its meetings for specific items. By this mechanism Unis4ne can act as a collective voice and point of contact for the region on HE academic issues. The ADC has now been tasked by the Board with managing the integration of HE into the newly established regional skills structures and its activities.

The establishment by Government of the new national skills infrastructure over the last four years reflects the greater emphasis it is putting on this agenda and also their recognition that regions are key to successful delivery.

In Spring 2002 the Sector Skills Development Agency was set up to develop a new network of Sector Skills Councils (SSC) who together form "Skills for Business". Each of the SSCs brings groups of employers together to work with educational providers to develop the skills they need for their own sector. The degree to which these activities have a strong regional focus, despite rhetoric to this effect, is questionable. SSC members tend to represent the most powerful employers and are often SE and London based. Also strategies and activities based on employer demand may at best act to reinforce regional skills disparities and at worst exacerbate them. Unless regional skills capacity building is built in as a requirement for each SSC through their Sector Skills Councils' Agreements it is hard to see the motivation for them to engage with this agenda.

In terms of SSC engagement with HE the SSSDA nationally has signed a Memorandum of Understanding with HEFCE on HE involvement in their activities. In the NE the early newly established SSCs are currently engaging in a rather ad hoc fashion usually with individuals in relevant university schools and departments. Senior management engagement is not yet well developed. There is generally a view in the universities that the academic portfolio is driven by the student market and there is little need for new bureaucratic structures. These opinions may become more entrenched with the introduction of the new fee regime. Institutional views about priorities for the new Agency are to increase student demand for unpopular study areas,

increase employer knowledge of HE and demand for graduate employees rather than directly interfering with the shape and content of the HE curriculum. By and large they see existing employer engagement such as through membership of course teams, and accreditation by professional bodies as being adequate.

In July 2003 the Government launched the National Skills Strategy to address issues of employer skills needs and to ensure that individuals have the skills they need to be employable. The previously established FRESAs (Frameworks for Regional Employment and Skills Action) were replaced by Regional Skills Partnerships (RSPs), in the North East called Skills North East. The 2005 Skills Action Plan's stated priorities included increasing employer demand and involvement in skills, raising individual's aspirations for lifelong learning, helping to integrate the workless into education and employment and raise the qualification levels in the workforce. It aims to work to align the disparate strategies that exist across the different organisations and agencies in the NE and seeks to develop greater coherence to existing work by developing joint investment plans. To increase employer demand and investment in skills it is seeking to ensure an accessible business support network within which support for skills and recruitment can be readily addressed.

As far as HE is specifically concerned there is a commitment to supporting widening participation programmes such as Aimhigher, academic progression routes to higher education, most likely through the planned North East Lifelong Learning Network (LLN), and to promote innovation by supporting companies to access expertise from HEIs through an expanded Knowledge Transfer Partnership Programme, in practice probably working closely with Knowledge House.

As a result of a skills audit carried out by One NorthEast, the areas of construction, creative & cultural, engineering, health & social care and the voluntary & community sectors have been identified as needing increased training provision. Developing management and leadership capacity are also important themes of the Skills Plan based upon an identified need to embed an understanding of innovation and innovative practice in the workplace.

However the Skills White Paper (March 2005) asked RSPs to consider how HE can be integrated into their work to meet regional needs. This included how best to support progression from FE to HE and stressed the role of the RDA and business support for postgraduate studies and university research which benefits their skills agenda and economic development in the regions. In addition the Minister wrote to Chairs of RSPs to specifically request effective HE representation on the RSP including the HEFCE regional consultants, and specified important elements of a regional HE skills agenda. This includes:

- working with LLNs,
- guidance on the regional distribution of additional student numbers,
- stimulating closer working relationships of HE into Sector Skills Councils and with employers.

Regional managers of Foundation Degrees Forward should ensure FD development is informed by employer needs and that development of FDs is assisted through co-financing arrangements, involving the identification of regional higher level skills needs, the development of work related learning (including CPD) and gaining employer support for post graduate studies.

Under current arrangements HE is represented on the RSP through the Executive Director of Unis4ne and the HEFCE Regional Consultant will be invited to join in the near future. HEFCE currently seeks views on its regional activities through a Regional Advisory Group composed of ONE, LSC, GONE. There has been considerable unease about the operation of this group by the universities on the grounds that there is a marked lack of HE knowledge and expertise and its members are in practice quite junior members of their respective organisations. The enhanced regional skills agenda has required consideration of a more

integrated structure and a new draft proposal drawn up by HEFCE, ONE and Unis4ne is yet to be considered by its respective organisations. It is hoped that the proposal will produce a new, inclusive, flexible Higher Education Learning, Teaching and Skills Group (NE) to maximise the process of integration and assist delivery.

Some initial comments on the newly emerging situation include welcoming the recognition of HE's contribution to the regional skills agenda and its greater involvement in the work of the RSP. The support for Aimhigher and other HE regional initiatives is welcome and the new structures could well help co-ordinate and develop this work. The RSPs will provide a useful forum for generic HE issues however, much activity e.g. employer engagement, FD and CPD developments and work with SSCs operates outside this framework at institutional and sub-regional level. Dialogue with regional business employer organisations e.g. CBI, FSB, Chamber of Commerce has been difficult given the public position they have taken on not supporting increased HE participation in the NE. There is also concern that the growing complexity of the system may make it highly bureaucratic and difficult to navigate and manage.

## **Conclusion**

The HE sector in the NE, as in other regions, is now being drawn into major national rethink as the best way to deliver the skills appropriate to the needs of a developing knowledge economy working in a global context. Skills are demonstrably a very high political priority, as is the Government's commitment to driving the market into higher education, most notably through the new fee regime. The crucial issues are:

1. whether students will enter HE in the same numbers,
2. whether HE costs to students will influence their subject choice, and
3. whether this will meet the future employment needs of the UK.

This is yet to be seen.

In the meantime considerable effort is being made to develop and support mechanisms to incentivise the HE system to be more focused on higher level skills development. Within the region lack of private sector support for the 50% target by the representative organisations is in sharp contrast to the employers consulted for this report. They described excellent experiences of employing NE graduates and are actively involved in a variety of ways with the HEIs (e.g. Council membership, course advisers, Visiting Professors, graduate enterprise mentors etc.). Aimhigher was thought to be working well with Aspire, the business sponsored regional schools programme. There has been excellent private sector involvement in the rapid development of employment related Foundation Degrees and extensive working together on issues of work placements and graduate enterprise activities and recognition of the importance of international students to the region.

However, a significant number of regional stakeholders, particularly SMEs, feel too many graduates are being produced for the NE economy, that there are gaps in provision in some areas (e.g. Retail and Logistics) with over provision in others and that most courses should be professionally/ vocationally focused and better marketed directly to employers. There is a wish for more collaboration between institutions on issues such as credit transfer, work based/ flexible learning which may be too high cost for one institution, provision for low demand but the higher level skills/courses and the need for sharing of best practice across the sector. Overall, however, the business community commented unanimously on the improvement that had occurred in HE-business relationships over the last five years.

## SWOT analysis

<p><b>Strengths</b></p> <p>Net importer of students into region</p> <p>Good student experience as demonstrated by QAA institutional audits and pilot of National Student Feedback Survey</p> <p>Comprehensive academic portfolio between all HEIs in relation to labour market needs with exception of few specialised areas eg. aviation</p> <p>Considerable involvement of employers in curriculum development to ensure regional and national needs are being met eg. Army, Nissan and ICT courses in region via New Technology Institute (NTI)</p> <p>Good progress in region on Foundation Degrees (FD), working with employers, and relationship with Sectors Skills Councils (SSCs) and Sector Skills Development Agency</p> <p>Some very good examples of FE/ HE collaboration leading to well developed vocational progression routes eg. health and social care, ICT,</p> <p>Some very good initiatives to widen participation e.g. access to HE courses, information, advice and guidance (IAG) and curriculum development (some funded by AimHigher)</p> <p>Graduate retention programmes valuable in increasing numbers employed in the region</p> <p>Many very good experiences from companies of North East graduates (in contrast to views from employer representative groups such as Chamber of Commerce and CBI)</p> <p>Close collaboration between universities through Unis4ne at strategic and operational levels</p> <p>Increasing flexibility of universities to respond to learning and skill needs of employers in terms of quality assurance (eg. for small learning packages) and delivery mechanisms (e-learning)</p>	<p><b>Weaknesses</b></p> <p>Funding of HE and recruitment of students is linked to <i>student demand</i> at national level, rather than <i>regional or national needs</i> of the economy except for intervention by HEFCE with small incentives for Additional Student Numbers</p> <p>HEIs respond primarily to <i>national</i> markets rather than <i>regional</i> as latter often lack a critical mass at degree level and funding programmes are typically national.</p> <p>Branch plant economy – lack of HQs of many medium or large businesses in region affects likelihood of local sourcing of higher level skill provision</p> <p>Slow speed of response of HEIs to employer needs compared with private sector provision for lower skills, especially due to QA constraints</p> <p>Need for key teaching staff to develop their own CPD to build upon knowledge transfer and work-based learning pedagogic skills</p> <p>Barrier of initial investment by HEIs for flexible learning in new curriculum areas, especially for e-learning materials</p> <p>Lack of provision in some key growth areas e.g. Retail</p> <p>Not enough employer engagement with some FDs – more part-time courses desirable or else danger of simply being HND replacements</p> <p>Delays in some SSCs establishing a regional presence</p>
<p><b>Opportunities</b></p> <p>Lots of scope for new products – need to build awareness and understanding of HE in</p>	<p><b>Threats</b></p> <p>Top up Fees / new funding regime will create a more competitive environment which could</p>

<p>business community, but there is a substantial market for CPD at higher levels</p> <p>Build on success of FDs – more are desirable if demand can be demonstrated. Has been a problem in persuading companies to release existing staff. Single industry FDs have been more successful e.g. chemical, automotive and health</p> <p>Potential for more recruitment of local graduates by employers in region as most have a positive experience of employing graduates.</p> <p>Potential to replicate collaborative (multi-HEI) Centres of Excellence in Teaching and Learning (CETLs) in more subject areas if music and health are successful</p>	<p>hamper collaboration between HEIs</p> <p>The introduction of new fee regime will raise 3 crucial issues: (i) will students enter HE in the same numbers?; (ii) will the (variable) cost of HE to students influence their subject choice?; and (iii) will this meet the future employment needs of the UK? The answers are hard to predict.</p> <p>The lack of private sector support within the region for the government’s 50% HE target by the representative organisations (eg. CBI, Chamber of Commerce) is in sharp contrast to the positive experiences of many individual employers of graduates</p> <p>There is a concern that the growing complexity of the Regional Skills network and associated systems are becoming highly bureaucratic and difficult to navigate and manage, along with many other regional development activities</p> <p>End of ESF subsidy for postgraduate programmes will threaten a large amount of provision by some universities which is aimed at regional economic needs eg. digital media, nanotechnology, creative industries but not yet with viable local market</p> <p>New National Student Feedback Survey could adversely affect recruitment of courses meeting regional needs, especially where they are in early stages of growth and still experiencing teething problems</p>
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## **CHAPTER V: CONTRIBUTION TO SOCIAL, CULTURAL AND ENVIRONMENTAL DEVELOPMENT**

### ***Social Development***

Social and community engagement for the universities in the North East is extensive and multi-faceted. Projects range in scale from major physical regeneration schemes where the universities seek to transform disadvantaged community environments, to collaboration in mainstream public services such as in health and social care, to collaborative research for community benefit, and to student community action.

### **Physical regeneration**

All five universities in the region have made significant campus developments in recent years, with Sunderland and Durham in particular making investments in completely new campuses on former industrial inner city sites as part of wider regeneration strategies.

Sunderland has been a centre for education since 674 AD, when Benedict Biscop built St Peter's Church and monastery. The broad sweep of river bank surrounding the ancient church of St Peter's is now the setting for the University of Sunderland's £50m award-winning Sir Tom Cowie Campus at St Peter's.

The development of the new campus started in 1993 on a site within the Tyne and Wear Development Corporation area. Sunderland Business School opened here in 1994 and the spectacular David Goldman Informatics Centre followed two years later. In March 2004 the £9m Media Centre was launched by Minister for the Arts Estelle Morris. Built on a derelict former industrial site (shipbuilding and engineering) and adjacent to areas of low university participation, the flagship St Peter's Campus has made a significant contribution to Sunderland's regeneration.

In September 2002 the campus was renamed the Sir Tom Cowie Campus at St Peter's, in honour of the Sunderland businessman who is one of the University's most loyal supporters and in celebration of Sir Tom's 80th birthday. The £50m campus is now home to about half of the University's total student population of well over 14,000.

CABE, the Commission for Architecture and the Built Environment, recently used St Peter's Campus as an example of how good building design can have a positive impact on students and staff. It noted how the St Peter's riverside development had opened up a landscape closed to the public for over a century focusing on the river and drawing on the area's history, culture and identity. This is the third accolade for the riverside campus. In 1995, St Peter's was named the Sunday Times/Royal Fine Art Commission Building of the Year. Three years later it received the Civic Trust Award for "outstanding contribution to the quality and appearance of the environment".

Durham University's Queen's Campus at Stockton is another riverside regeneration project with multiple objectives, linking to the regional economic development strategy and with the general aim of widening regional access to the Durham University knowledge base. The campus is now developing as an important regional centre for research and teaching in Health, Medicine and the Environment. Originally a joint venture with the (then) Polytechnic of Teesside (now University of Teesside) and Teesside Development Corporation (TDC), the project was initiated in 1987; physical development on site began in 1992 and development



remains ongoing. To date site development costs have been approximately £40m and the site now has 2000 students. Further details in annexes.

The other three universities have also been involved in campus developments which have had a positive effect on their surrounding neighbourhoods. Teesside have focused their campus developments on a single site in central Middlesbrough. Over the past decade a number of building projects have been completed as part of an £80 million programme, along with substantial enhancement of the public realm and the conversion of some derelict and under-used buildings around the campus. Development of the campus has been seen as important for the wider enhancement of Middlesbrough town centre and the University has worked closely with Middlesbrough Borough Council and the Town Centre Company to connect the campus into local improvement schemes. Examples have included the creation of a new landscaped entrance to the University, signage, a building lighting scheme, collaboration with the town traffic engineers to reduce traffic flows and enhance pedestrian routes for both students and local people, refurbished terraced houses for student occupation, and the re-use of a Victorian school building as a graduate incubator. The next phase is to collaborate with the Council and Town Centre Company to refurbish other buildings in the town centre, off-campus, to house new businesses that have 'graduated' from University incubators.

Northumbria University have reversed a previous policy of expanding through new campuses and have retrenched to their two Newcastle campuses, although both have been extensively developed. Currently the University is investing heavily in the development of sites adjoining the city centre site but on the other side of the urban motorway. Some initial development took place on derelict sites to provide student accommodation and space for Engineering. Currently the University is starting work on a major development of a site formerly occupied by a cinema and car park. Three of the University's academic Schools – the School of Design, School of Law and Newcastle Business School – will relocate to the site in September 2007. The total development, including the refurbishment and reconfiguration of buildings and a greening and pedestrianisation of the existing campus, will cost £102.9 million – the University's largest ever investment programme, making a major contribution to the city's growth and regeneration.

The University has also contributed considerably to the regeneration of Newcastle's city centre, having refurbished a variety of old buildings adjacent to, or close to its city campus. These include student accommodation at Garth Heads, Art Conservation housed in Burt Hall, and the state-of-the-art IT and teaching facilities in the Trinity Building (a deconsecrated church) and The Drill Hall. The Law School is housed in the old Dental Hospital, a 19th century building now renamed Sutherland Building.

Newcastle has mainly stayed within its city centre campus although it is now looking at satellite research campuses around the city. As with the other universities, Newcastle has been making large investments in new buildings, including new research buildings for environmental science, cancer and aging. The Devonshire Building for the new environment institute in particular has won numerous awards in particular for its sustainable design. The University was heavily engaged in the International Centre for Life and located its Institute for Human Genetics there. Numerous other buildings have been refurbished, along with some environmental improvements which benefit visitors and the local population who cross the campus each day. The three most significant developments though are currently in development – the cultural quarter project is described later in this chapter, a new Business School, and Student Services building, which is proposed as a gateway to the campus on a highly prominent site, and biggest of all is the new science city project to redevelop a former brewery site as a centre for research and commercialisation. The latter is particularly significant given its location between a very deprived area and the city centre and it offers significant opportunities for connecting these communities into the city centre and providing local service jobs. The cost of all these proposals together runs into the hundreds of millions.

## **Strategic partnerships for community regeneration**

The universities in the region have participated at various levels in a wide range of strategic partnerships focused on community regeneration. This includes engagement in the formal partnership bodies for government funded initiatives such as the Single Regeneration Budget as well as participation in individual projects.

### **University of Teesside Community Regeneration Programme**

Teesside has been involved in a number of local community regeneration activities that together add up to a significant programme of work which relates strongly to its mission.

Key areas of activity have comprised:

Schools Liaison – raising aspirations and attainment through projects such as Meteor, a pioneering programme targeted on primary/early secondary school children in disadvantaged communities.

Community Informatics Research Applications Unit (CIRA), established with ERDF support in the late 1990s to develop and test out approaches to community development using ICTs for learning, employability, creative skills development and social development. CIRA has worked with a wide range of community groups and organisations, as well as schools (working with excluded youngsters, for example).

Creative & Cultural Industries Team, based in a central department of the University with a remit to work with local communities on the development and delivery of new programmes of creative activity. Funded by SRB, this project played a large role in increasing the visibility of the University to a wide range of groups.

Social Futures Institute (SoFI) brings together over 50 specialist researchers concerned with the North East's social and cultural well-being and economic prosperity. Areas of expertise include: asylum seekers and refugees, children and young people, crime and disorder, domestic violence, drugs, community cohesion, public health, homes and homelessness, neighbourhood and urban renewal, social exclusion, sport and leisure

NISAA aims to enhance Black and Asian women's opportunities for health and well being. The project combines community development work and academic research.

A strong teaching and research programme in Professions Allied to Medicine delivered by the School of Health makes a substantial contribution to the development and delivery of public health initiatives.

### **University of Sunderland - Working with the Sunderland City Council to stimulate Regeneration**

Sunderland, in North East England, has set out to become one of the best places to live in the UK. It is currently re-casting itself and changing its image. Its aim is to offer everyone the opportunity to live a life that is good, both now and in the future. It is a city that is striving to be cleaner, healthier, more environmentally aware and innovative and creating a better, more sustainable future for its citizens.

The University has been identified as a key partner in this process and underpins what the City Council is aiming to achieve in a number of ways:

- By becoming a high quality civic university offering high quality teaching
- Becoming part of the re-invention of the City
- Offering students life changing opportunities and transformations – raising aspirations of people from all backgrounds including deprived areas, older people etc.

The university also plays a central role in delivering some of these changes by:

- Providing graduates for new knowledge based industries
- Supporting industry – improving performance & competitiveness e.g. advanced glassmaking, radio & TV production, design support, support for the automotive sector
- Supporting the development of new graduate enterprises
- Investing with the City Council and others in the physical infrastructure – St Peters Campus, Sunderland Science Park etc.
- Playing an active role in developments through partnership and staying connected at all levels – City Partnership Group etc.
- Embedding university activities into City aims – e.g. development of knowledge based industries, helping to create the ‘Smart City’
- Active in helping change the image – active member of New Image Strategy Group. Using student/other case studies to build new image, promote buoyancy of the City.
- Promoting quality, quality, quality – campus, teaching standards etc.

*‘The key to the city’s future prosperity lies in persuading people to come into the city and stay in the city, to live, work, study, and invest. For every 1000 people persuaded to live in the city, the local economy benefits by a minimum of £12.5m per year. For every 1000 students, there’s a boost to the local economy of £6m per year.’ – Sunderland City Council*

## **Collaboration in delivery of public services**

The major investment of the universities in collaborating with the wider public services is in the area of health and because of the close link between the universities and the health sector in the North East, there are more direct contributions. The universities do act as technical suppliers to the NHS, particularly in the area of bioinformatics and health information management. There is a high degree of resource sharing that reinforces research performance simultaneously with patient care. The university sector is also particularly active in ensuring that the benefits of research undertaken in the region are maximised through ethical implementation. Given the importance of health for overcoming social exclusion, much of the research work is piloted in areas of extreme deprivation.

An example of a university facility that has become part of the regional health system is the Newcastle University Cancer Research Unit. Although built up on research grants and programmes, the Centre “straddles the clinical-laboratory interface” and is devoted to ensuring “the availability of state-of-the-art treatment to citizens of the North of England”. The centre has close links with the local community and was originally funded by the North of England Cancer Research Campaign. Despite its merger with the national Cancer Research Campaign, the Campaign retains strong links with local fund-raising, and the Centre benefits from the stability of funding this provides.

The size of the HEI sector in the region and their infrastructure and knowledge bases in the field of healthcare provide an important contribution to the regional health system. There are a large number of honorary academic appointments of NHS staff within the health and allied departments of all five regional universities, which contributes to continuing professional development in the NHS. The regional universities also provide a mentoring service for NHS R&D carried out within the Health Service.

Universities also contribute through their facilities, which in some cases are closely integrated into the fabric of the infrastructure of the NHS. Newcastle’s Medical School makes funds available for the support of seminar and lecture facilities wherever there are medical students present. The 1998 QAA report for Medicine at Newcastle highlights one of its achievements as managing to diffuse its teaching activities across NHS facilities in the region. By providing funds to the hospitals for these facilities this contributes to facilities within the hospitals, which are not central to patient care. Increasingly such provision is delivered in

collaboration, with Durham also offering a medical degree in partnership with Newcastle. Similarly the region's nursing schools at Northumbria and Teesside have strong relations with hospitals across the region with student nurses undertaking placements and staff engaged in support activities.

One example where first Newcastle and now Northumbria University have developed a strong working relationship with the community to address the health needs of socially-excluded communities is in the Adelaide Centre in the West End of Newcastle. The Centre provides a fully functioning health centre for the residents of Benwell, but it also is used for the practical training of students. The residents thus benefit from a health environment enriched by continual exposure to research-active health professionals as well as the innovative treatments they can bring.

Northumbria University provides a wide range of nursing and allied professional-based training. However Northumbria exceeds its basic role as a training provider in acting as an advocate for NHS modernisation, focusing its training around one of the key issues for Health Service reform, the removal of demarcation in professional health occupations. As well as excellent formal teaching, Northumbria co-ordinates a series of events, seminars and discussion groups. The faculty also hosts events for the regional branch of the National Playwork Association, which trains staff to run play schemes aimed at encouraging physical fitness through play.

A final area where universities make a contribution is in supporting health governance by helping inform on priorities and directions for developments in local, regional and national systems of health. The Policy, Ethics and Life Sciences Research Institution has been created as part of the International Centre for Life, a Millennium project in Newcastle. It is jointly supported by Newcastle and Durham Universities, and aims to stimulate public discussion of the social issues arising from increased application of biotechnology within medicine. Within the Centre for Life, there is also a Northern Genetics Service, which provides laboratory and test services for the Northern NHS, whilst also conducting applied research into a range of fields including cytology.

Other forms of service collaboration in delivery include in education where the universities deliver training of teachers, but also engage in wider updating and reskilling teaching staff for changing needs. An example of this is in the provision of school leadership training through the North Leadership Centre, an umbrella organisation within the University of Newcastle making provision across all three elements of the NCSL's (National College for School Leadership) Leadership Programme. The Centre is also the lead partner with the Durham LEA Management Development Centre and the Beacon and Training schools across the North-East in the North East Affiliated Centre (NEAC). This is a regional centre, established with eight others to cover all 9 government regions in England to promote and provide NCSL leadership programmes and embrace complementary programmes across the North-East to support and strengthen leadership in schools.

A further example of partnership in the education sector is the development of All Saints Community College in Newcastle. This 'fresh start' secondary school replaced two existing secondary schools with falling rolls and financial problems. The project was a three way partnership between

- the University of Newcastle
- the Newcastle City Local Education Authority
- the Church of England

The University has a base within the college, where lecturers and researchers will

- aid curriculum development
- deliver teacher training
- oversee projects such as the development of a management information system

## **Research collaboration to assist social development**

All five of the universities in the region have research centres focused on different aspects of community and social development, health and welfare. Some of Teesside's activities were mentioned earlier in relation to its community development programme.

Also on Teesside, the Wolfson Research Institute is based in a purpose-built building on Durham University's Queen's Campus, at Stockton-on-Tees and began operation in November 2001. The building provides accommodation for 90 staff and 30 research students. The work of the Institute focuses on research on medicine, health and the wellbeing of people and places a particular emphasis upon analysing these issues in the north east of England. As well as helping meet the University's strategic goal of producing top quality cutting edge research, the Wolfson Research Institute strengthens links with the surrounding region and has a key role in meeting its strategic goal of enhanced regional engagement, via contributing to policy formation and implementation.

The Institute has been developed through a partnership involving Durham University, Wolfson Foundation, European Regional Development Fund, Stockton Borough Council, English Partnerships, NHS and others.

Research is organised within a Frontiers of Knowledge framework, which seeks to push back frontiers and cross institutional boundaries in three registers:

- research frontiers within disciplines;
- research frontiers between disciplines;
- translate the results of research across the boundary between the University and its partners and stakeholders, especially in the north east of England.

The Institute will also explore scientific ('expert') knowledges, lay knowledges, and the relationships between them in the context of science and public policy and further develop links beyond the University so that research informs wider debates and practices and, more particularly, to seek to use the results of leading edge research to address problems of development and regeneration in the north east of England.

Newcastle University has a number of research groups with varying social, urban, regional and rural research interests. Several of these are grouped together in the Institute for Policy and Practice, which brings together around 90 academic and research staff in six centres including the Centre for Urban and Regional Development Studies, Newcastle Centre for Family Studies, the Centre for Learning and Teaching, and the Global Urban Research Unit. CURDS was established to provide a focus within the University for research into urban and regional development problems. It has grown into a major international multidisciplinary research institute undertaking research for local and regional bodies, UK government departments, the European Commission and private industry. The Centre's mission is to undertake basic research aimed at improving understanding of the process of area development in advanced economies. It also undertakes strategic research concerned with the design and evaluation of public policies relating to territorial management.

Northumbria's Centre for Public Policy evolved out of the Politics and Sociology divisions and was developed especially with ESF support. Contracts undertaken for Government Office and the Regional Assembly have led to positive feedback in terms of the research influencing policy changes. The Centre has a growing national reputation and has been successful with EU tenders for transnational work – e.g. links between culture and social inclusion across Europe. Regional funds have been used to develop capacity within the Centre and are contributing to its growing body of knowledge and its reputation.

## **Rural development**

Rural regeneration research in the region is carried out within the Centre for Rural Economy at the University of Newcastle. The Centre was established in 1992, in memory of the 10th

Duke of Northumberland, to specialise in research into the rural economy. Specifically this concerns the investigation of the social and environmental basis of economic activity in rural areas.

An example of the kind of work done by the centre is the project called 'Towards a new rural economy' which was sponsored by a number of partners including ONE North East / Northern Rock Foundation / Northumberland County Council / Durham County Council/ Countryside Agency / NNPA / Forestry Commission / GONE / Northumbria Tourist Board. This project provides:

- direct support to small and micro rural businesses through a programme of postgraduate student placements
- delivery of a programme of short courses targeted at public sector policy makers / business advisers and small businesses
- extension of the events and activities organised under the Northern Rural Network to improve information exchange and promote best practice in rural development

CRE has initiated the formation of the Northern Rural Network, as a network for academics and practitioners involved in rural planning and rural development in the north. The initial focus of the network has been a seminar series on topical rural policy issues. The opportunity will be created for academics to showcase and explain the findings of current research work and for practitioners to identify research requirements which the Universities might satisfy. The Universities of Newcastle, Northumbria, Durham, Sunderland and Teesside are all committed to take part. The network will have the opportunity to evolve in the directions its members choose and there offers ample scope for new working relationships and alliances between academics and rural development agencies and institutions to be formed. Sponsors include the Countryside Agency, Forestry Commission, Durham County Council, Government Office for the North East, Northumberland County Council, Northumberland National Park Authority and Northumbria Tourist Board.

## **Student community action**

The North East has an extensive history of development of student community action. This is a distinctive attribute of the UK university system which differentiates the UK from many other HE systems in Europe, and is more akin to activities in North America and Australia. These activities are mainly developed through the students union, which although primarily existing to provide welfare services specifically for students, is often a significant 'provider' in the community. Student Community Action at the University of Durham is one of the biggest SCA groups in the country. Around 800 student volunteers are involved in over 40 projects within the local community including music, drama and cookery clubs, after-school tutoring, sports coaching, hospital visiting, litter picking and help with gardening and decorating for the elderly.

Both universities in Newcastle collaborate closely with their community activities. Student Community Action Newcastle (SCAN - at Newcastle University) and Volunteering at Northumbria (VAN - at Northumbria) enable students to become actively involved in community work, delivering their own projects and working in conjunction with other agencies. In many cases, students from both universities work together on the same projects and they produce a joint magazine on their activities. These include projects with the elderly (Age Concern), with children (Barnardos), and with the homeless (Peoples Kitchen).

Law students at Northumbria run Law Clinics under supervision from academic staff to provide free legal advice to those who cannot afford to pay for legal advice. The Student Law Clinic has attracted much national attention since its inception in 1991 and its academic leader was recently awarded a HEFCE Teaching Fellowship in recognition for developing this unique and innovative scheme. There have been a number of high profile legal cases, including miscarriages of justice for serious crimes such as robbery and murder.

The University of Teesside has continued to develop and support volunteering opportunities through the Community Volunteers Project (CVP) supported by the Higher Education Active Community Fund. CVP links with over 100 local voluntary/community organisations and is particularly involved in promoting opportunities that develop both social and academic skills.

There are a number of mechanisms which exist to monitor and accredit extra curricular activities. Within Student Community Action Newcastle (SCAN) at Newcastle University for example students can choose a SCAN Volunteering module as part of their degree programme and earn academic credits. Students must be able to demonstrate that their activities have contributed to the host organisation's aims and objectives and students are also required to undergo assessment. Students can also get accreditation through the Students into Schools project - the University has provided accreditation modules that can be taken by students who are going into schools to help to deliver the curriculum and act as role models for pupils. At Teesside University students are able to register with the Centre for Lifelong Learning and gain credit for work as student representatives, volunteers, ambassadors or mentors. Students undertaking practical elements of undergraduate programmes are also able to gain credit for their extra curricula activity by submitting portfolios of work.

### **Students into Schools**

Established in 1993, the Tyneside and Northumberland Students into Schools Project works with undergraduates from Newcastle University and Northumbria University to raise the educational aspirations of learners in local schools, colleges and community learning centres. Since 1993, SiS has sent over 6000 university students into over 200 schools, colleges and other education settings to provide encouragement and advice to local learners of all ages. The undergraduates are NOT training to be teachers and are drawn from a wide range of degree programmes, usually volunteering to work for one half-day each week either tutoring at a placement or supporting campus-based events. Most of the undergraduates will gain academic credit for their tutoring through optional modules by collecting evidence of their employability skills of self-management and interpersonal communication.

A Student Tutor typically makes about nine half- or full-day visits to a school, college or other education setting (a 'placement') over 5-10 weeks each semester.

- to arrange an initial meeting with the Placement Supervisor to discuss mutual goals and expectations;
- to act as an extra 'learning resource' alongside the Placement Supervisor, similar to a classroom or teaching assistant (and not as a substitute for a teacher);
- to mentor individual learners where this is appropriate, providing individual support and guidance;
- to get feedback from learners on the Student Tutor's input, tailoring questions to suit the learners.

As well as the two Universities and the host placements, partners include: Community Service Volunteers; Higher Education Funding Council for England; Learn2work Northumberland; Newcastle LEA; NEXUS; Teacher Training Agency; TWEBLO; Universities for the North East

	Placements		Students tutoring in academic year ending										
	Total	Current	Total	03	02	01	00	99	98	97	96	95	94
<b>TOTAL</b>	<b>343</b>	<b>196</b>	<b>4884</b>	<b>700</b>	<b>638</b>	<b>684</b>	<b>555</b>	<b>425</b>	<b>453</b>	<b>372</b>	<b>386</b>	<b>400</b>	<b>270</b>
<b>TYNESIDE</b>	<b>239</b>	<b>139</b>	<b>4207</b>	<b>576</b>	<b>538</b>	<b>556</b>	<b>436</b>	<b>363</b>	<b>391</b>	<b>332</b>	<b>344</b>	<b>400</b>	<b>270</b>
Gateshead	39	27	673	121	119	111	73	33	45	37	44	51	38
Newcastle	107	67	2178	300	292	272	224	205	231	175	167	184	128
N.Tyneside	62	30	996	97	87	125	108	94	87	98	95	129	76
S.Tyneside	31	15	360	58	40	48	31	31	28	22	38	36	28
Northumberland	85	43	646	101	95	125	119	62	62	40	42		
Sunderland	4	3	12	11	1								
Regional TCT	6	2	9	2	4	3							
Regional other	9	9	10	10									

## ***Cultural Development***

All the universities make a major contribution to the cultural agenda in the NE actively working with cultural agencies to support artists and arts organisations and culture-led regeneration initiatives. They also work closely with the creative/cultural industries on issues of skills, innovation and business development. University representatives populate the Boards/committees of cultural venues and agencies and vice versa. In particular Arts Council England NE is discussing 3 year development plans with each university to jointly fund regionally important arts initiatives.

Unis4ne has a very active Culture Committee composed of university representatives and key arts stakeholders who work together on a number of initiatives (eg the EU funded Cultural Skills Development Programme and Culture 10).

HEIs are a leading provider of museums and galleries not only supporting scholarship but also providing a link with the regional community and attracting large numbers of tourists. For example the University of Sunderland has been closely involved in the creation of the National Glass Centre which is a centre of international significance in the art and design world. This spectacular award winning £15 million all glass building was funded partly by the national lottery and is sited next to the University's St. Peters Campus. The School of Arts, Design and Media has two workshops in the centre which are both used for teaching undergraduate students, and the School is also bringing in glass blowers of international repute from around the world to demonstrate techniques and styles. The School's facilities at the National Glass Centre are also supporting research in glass.

Newcastle's Hancock Museum mounts exhibitions from its permanent collections of natural history and ethnography but also has regular and very popular temporary exhibitions. It is promoted as a public museum of particular interest to families and school parties. The University also has the Hatton Art Gallery, Museum of Antiquities, and the Shefton Museum of Ancient Greek artefacts. Currently the University is undertaking a £30 million plus redevelopment of its museums as part of its plans for a Cultural Quarter (see box).



Durham University provides the Oriental Museum, the only museum in Britain to concentrate exclusively on the major cultures of the Orient and the Old Fulling Mill Archaeological Museum, plus Botanical Gardens.

For some HEIs, public access to their cultural facilities is a requirement of a funder, a benefactor or collection donated to the institution. The Museum of Antiquities at the University of Newcastle for example, cares for the collection of the Society of Antiquities, which requires free public access to the collection. The museum has a collection of prehistoric, Roman, Anglo Saxon and medieval artefacts and supports courses and research in archaeology, classics, museum studies etc. The museum became the first UK museum to offer 'virtual visits' by hosting an exhibition on the web.

All of the universities have some form of university theatre, hosting a combination of university productions and visiting productions from small touring theatre companies. Newcastle University houses a theatre currently undergoing major reconstruction and expansion as the new home for Northern Stage. Sunderland has the Bede Theatre and Northumbria has the Lipman Theatre.

The Universities of the region provide a significant proportion of the workforce for the highly skilled and growing cultural sector, both through activities in university-based venues as well as increasingly contributing to cultural activities outside the universities.

HEIs have also become involved in civic initiatives, for example Teesside University and Middlesbrough Council are developing a cultural quarter for the town centre, supported by SRB funding. Through the creation of a University Square, the establishment of a digital arts and media centre and the provision of a new building for the North Region Film and Television Archive, with storage and viewing facilities, the university is a key player in this development.

As well as being a leading provider of cultural facilities and activities, the universities of the region constitute a valuable part of the culture of the region in themselves. Their architectural and intellectual presence provides a constant sign of the importance of learning; they are significant cultural players and provide a cultural focus for the region.

Another example is the input of the regional universities into Newcastle/Gateshead's unsuccessful bid to become European City of Culture (2008). In participating, HEIs brought expertise, facilities and contacts to strengthen the proposal. All the universities in the region are also actively supporting the two major new developments on the Tyne: the Baltic Contemporary Arts Centre and the Sage Gateshead Music Centre.

Most universities in the region hold free public lectures, which often attract distinguished speakers. The Departments of Music at Durham and Newcastle both act as regional cultural providers through their lunchtime and evening concert series.

The Regional Cultural Strategy for the North East has identified regional cultural distinctiveness as a significant asset in relation to regional development and quality of life of the region's citizens. The Universities play an extremely important role in archiving, recording and analysing and developing the region's culture for example at Northumbria University's Centre for Northern Studies or at The Basil Bunting Poetry Centre at Durham University through to Culture Lab at Newcastle.

The mainstream teaching programmes can also underpin cultural activities and universities run collaborative programmes with art venues such as Northumbria University with Live Theatre and Dance City. Northumbria Live Academy is an exciting partnership between Live Theatre, the region's premier new writing company, and Northumbria University, to develop graduate students' performance skills and experience. The Academy is the only graduate theatre company of its kind in Britain. The Academy is intended to bridge the gap between undergraduate study and the professional world of theatre, giving students invaluable opportunity to develop their skills and knowledge of the industry. Between ten and twelve

recent graduates spend an intensive year extending and developing their acting skills. The performance-based programme has been specifically designed as a bridge between an academic environment and the professional world of theatre.

Newcastle University has introduced the country's first degree programme in traditional and folk music. The music studied encompasses all of the British Isles, drawing on some of the country's finest singers and instrumentalists as tutors, such as Northumbrian piper Kathryn Tickell. The degree programme involves close collaboration with Folkworks based in the Sage Gateshead Music Centre at Gateshead Quays.

There is also an interweaving of key individuals who play dual roles in the governance of both the Universities of the region and its cultural institutions which leads to a shared understanding; this entente is further supported through groupings such as the Unis4NE Culture Committee.

### **City of culture**

An interesting and evolving story of collaboration and partnership in the cultural field links the bid for the European city of culture, with a series of physical developments in Newcastle-Gateshead and new collaborative approaches such as the Music CETL award.

The origins lie in 1999 when the respective local authorities of Newcastle and Gateshead agreed to co-operate through the establishment of Newcastle Gateshead Initiative, a 'destination marketing vehicle' for the city. This was the first time that Newcastle and Gateshead had worked to promote the area together and the joint initiative took advantage of the potential of the exciting new urban developments on both sides of the River Tyne to make a real impact on local economic prosperity. A key task for the newly formed NGI was to create the Newcastle Gateshead concept as something which people could identify with, and it was decided that entering the bidding to be European City of Culture in 2008 would be a good way of building a campaign.

In the early stages of the bidding process the NGI team arranged a series of meetings with different groups in the community, including several with the universities. The purpose of these meetings was to elicit support and ideas for projects that could be delivered as part of the city of culture programme. In parallel there were discussions with a number of research groups in the cultural policy field in the region's universities regarding studies that were necessary as part of the bid writing process and potentially monitoring the impact of the programme if successful in the bid.

A vast range of projects was suggested by the universities including infrastructure developments, conventional arts and culture events, and the introduction of arts and culture into all aspects of university activity. Many of these are subsequently being developed as part of the Culture<sup>10</sup> programme which replaced the City of Culture.

### **Cultural Quarter case study**

The stimulus for the cultural quarter project in Newcastle emerged from discussions for the City of Culture bid, a rethinking of previous policies towards museums and performance in the University of Newcastle, and a rethinking of the physical design of the campus with a new masterplan developed by Terry Farrell.

A bold new vision has now been developed by a wide-ranging partnership of local bodies, led by the University, to establish a Cultural Quarter. This will transform the space where City and University meet into an exciting and vibrant area of cultural and social activity: a major contribution to the region's cultural strategy. It will also exploit the latest new technologies to



develop a 'virtual Cultural Quarter', thus creating a range of accessible resources of national and international significance.

The first initiative was the preparation of an Estates Master Plan by the renowned architect/planner and graduate of the University, Sir Terry Farrell.

Second was the appointment of Dr Eric Cross as Dean of Cultural Affairs, to take the lead in developing a cultural strategy for the University, particularly strengthening the academic involvement with the museums, gallery and theatres. Dr Cross now works closely with the museums and gallery curators, the Chief Executive of Northern Stage and the academic community in developing and implementing this strategy.

The third initiative was the provision of a strong voice for the cultural agenda at the central University management level, with Dr Cross reporting to the Deputy Vice-Chancellor Professor John Goddard, who is responsible for central resourcing of museums and galleries. The Director of Estates also joined a newly established Executive Board chaired by the Vice-Chancellor, alongside the provosts of the new faculties.

The cultural assets that will comprise the heart of the Newcastle Cultural Quarter consist of three museums, an art gallery and a theatre complex. They are currently managed separately and sit within a poorly developed part of the University's city-centre campus. They are unrelated to each other in terms of marketing and operation and do not, therefore, take advantage of the opportunities to explore relationships between their activities and their assets (buildings and collections).



the operation of a Newcastle Cultural Quarter Advisory Group and an Operations Group. These Groups will also have responsibility for ensuring that the Newcastle Cultural Quarter and its constituent elements work effectively within

their City and regional contexts.

### **Northumbria University Cultural Management**

The Centre for Cultural Policy and Management (CCPM) was established in 1998 and has grown into an internationally recognised academic centre providing advice, project development and research in relation to cultural policy. It has also worked closely with a range of cultural stakeholders including Culture North East, the Arts Council England, The Sage Gateshead, the Newcastle Gateshead Initiative and the DCMS to support and develop the cultural agenda in the region. The University provides the only full time online postgraduate course on Cultural Management, focusing on understanding the arts/cultural sector and developing the appropriate business and management skills, including major events management. This developed from a local Newcastle project funded by EU structural funds and is now delivered to students across the world.

### **Sport**

All the universities manage sports facilities, events and conferences working with external partners including local sports partnerships, sports governing bodies and sports development agencies such as Sport England. They all have strong links with local schools and colleges. They meet together as the Unis4ne Sports Committee to plan and deliver a range of activities including the national Talented Athletes Scholarship Scheme in the NE region.

Sport Northumbria looks after the sporting, recreational, and health and fitness needs of students and staff at Northumbria University – whether in aerobics classes, mixed tag rugby, or playing and competing at a high level against other universities. It operates an impressive and nationally recognised programme of volunteering and coach education and promotes

strong links with local, regional, and national sports teams and governing bodies. At the performance end of the spectrum, Sport Northumbria caters for talented student athletes through a package of support and scholarships. The University has particularly strong links with local professional clubs in a range of sports at top national level, especially rugby and basketball.

### **Durham – Sport and the Community**

Active Sports is a National Lottery funded five year development programme designed by Sport England, which targets the nine sports of Athletics, Basketball, Cricket, Ladies Football, Hockey, Netball, Rugby Union, Swimming and Tennis. Of these sports, Cricket, Hockey, Netball, Rugby Union and Tennis were selected for inclusion in Year 1 in the Durham region. Active Sports is one of three interrelated Active programmes, along with Active Schools and Active Communities that aim to provide a comprehensive sports development system throughout England. Active Sports is seen as the link between Sport England's Active Schools, Active Communities and World-class programmes. The aim of Active Sports is to help young people, who have the ability and desire, to improve their skills by giving them increased access to organised sport.

In County Durham the programme is implemented by a partnership involving 7 local authorities, sport governing bodies, the local education authority, Sport England, and the University of Durham. The University's director of Sport has chaired the project from the beginning and the University provides various inputs including expertise for monitoring progress and impacts.

## ***Environmental Sustainability***

The 1993 Toyne Report and its subsequent review in 1996 demonstrated that much of the potential of the higher education sector to deliver sustainable development was not being utilised because of a lack of commitment by senior managers. Since then, research has demonstrated that through their practice, through the services they provide to others and the way they educate a new generation of civil society and by infusing sustainability topics into their curriculum across all disciplines, higher education institutions are achieving much more. The Sustainable Development Education Panel argued that both sustainability learning and using institutional strength to promote sustainable development were vital missions for universities. All the regional universities in the North East now have implemented environmental policies and practice them. Most of them are members of Association of University Leaders for a Sustainable Future supporting international partnerships to advance education for sustainability.

## **Institutional sustainability strategies**

The University of Sunderland has strongly integrated sustainable development principles into its activities, and was the first UK university to sign the global Talloires Declaration in 1994, and was appointed Regional European Node for the declaration. The university seeks to embrace collaboration with other higher education institutions in order to pursue environmental responsibility within the curriculum and management of the university. Partnership working has been crucial to this, with continuing professional development and the WWF both supporting the institution to make good on its commitment to lead sustainable development in the North East of England. Lessons have also been learnt from the experiences of the industry and business sector in, for example, developing environmental policy and in adapting the mechanisms of environmental reporting and associated tools of management and measurement.

The University of Sunderland capitalised on the support of non-governmental organisations and businesses to integrate sustainability into its management ethos. Sustainability is one of a limited number of issues Sunderland chose when it refocused its mission during the post-1994 reforms. The University of Sunderland was subsequently identified in the Toyne Review Report as a trailblazing institution and this has proved to be a powerful incentive to continue improvements within the university. Further support, provided by the Higher Education Funding Council for England, enabled Integra, the environmental consultancy of the University of Sunderland, to undertake an environmental review of the university in addition to a small number of other higher education institutions. This resulted in a workbook to help other higher education institutions.

One of the findings of the Higher Education Agenda 21 report was that standard environmental management systems used by businesses were particularly weak at changing the behaviour of staff outside central services. Consequently, Sunderland made a particular effort to ensure that teaching reflected this criterion, and awareness raising transcended particular campaigns to transform institutional behaviour. Indeed, the Higher Education Agenda 21 project cited the Sunderland reporting system as a best practice case study, converting initial enthusiasm and an ad hoc system into a reporting format that would outlive the egress of those staff who had driven the project.

Northumbria University has made a commitment to reduce the environmental impact of its institutional practices and at the same time to encourage others, through its role as an educator, to consider the environment during their working and personal lives. An Environmental Policy Working Group has been established which has responsibility for policy direction. The post of environmental policy officer has also been created for practical policy implementation. The university is aware that successful implementation requires the participation and commitment of all the university's staff and students. Durham has also developed an environmental policy, and its concerns arise partly from its location in a cathedral city which is also a world heritage site. There is an academic working group, Greenspace, that meets to discuss environmental issues. It has significant student involvement, and close links to the Durham City Council Local Agenda 21 group.

The University of Newcastle has an environment policy and has a University Sustainability Advisor who works jointly with the city planners to reduce the impact on environment by its activities and keeps its policies under continuous review for better environmental performance and delivery. The university has recently been a part of the extensive Higher Education Partnership for Sustainability with a network of universities nationally to deliver new methods education that boosts sustainable development. This partnership particularly aims to achieve its sustainable development goals by introducing issues such as environmental accounting and integrating innovation in the sustainable development processes.

## **Sustainability in teaching**

One of the outcomes of the Higher Education Agenda 21 project was to note the importance of higher education in producing a civil society with wide-ranging environmental and sustainability awareness. Teaching activities can have several effects on sustainable development issues. Firstly, universities have a responsibility to raise awareness of environmental and global issues by 'greening the curriculum'. Universities can also work towards sustainable development through widening participation to locally disadvantaged groups, student mentoring, and outreach centres. The University of Sunderland has been active in promoting a 'green curriculum'. In its procedures for approval of a new programme or for review of an existing one, the university has the stated intent to "work towards providing each student with environmental education within their academic programme, so helping them to develop an environmental perspective, and awareness of environmental issues and a personal commitment to promote and implement environmentally sound practices". At Sunderland, in its school of sciences, courses are offered, for example, in

environmental management (MSc), environmental biology (BSc (Hons)), environmental sciences (BSc), ecology (HND), and countryside management (HND). Northumbria University offers programmes in Environmental Management and Geography with stressing on sustainability as one of the key elements. They also run Master programmes on Disaster Management and Sustainable Development. They have also established a Disaster and Development Centre which researches on links between disaster and sustainability which has projects nationally as well as internationally.

Other universities run courses on the environment and sustainable development across a number of departments, for example, at Newcastle, the departments of agricultural and environmental science, geography, marine sciences and coastal management, and engineering. Durham has used the opportunity granted to it by the opening of its Stockton campus as a focus for its environmental teaching, and indeed to introduce a range of modern subjects. Among the programmes are environmental management, technology and development, biological sciences and geography. As part of its teaching and research activities, Newcastle University manages a number of estates including a botanic garden and a farm, and for both of those areas there is a significant commitment to their demonstrable sustainable management, as well as using this to encourage sustainability awareness among students.

The School of Civil Engineering and Geosciences at the University of Newcastle runs a professional development programme on Water Conservation and Management as a part of Hydroinformatics and management systems course. They also host the prestigious mining fellowship from the Environment Agency, the first institution in the country to have research programmes on active mine pollution particularly mining water - it being the major source of pollution particularly in Wales, and the north and west of England.

## **Sustainability research and its application**

An example of how research can benefit the local community is the wetland project in the County Durham village of Quaking Houses, where the environment was blighted by polluted water running off the nearby pit-heap. Newcastle University scientists solved the problem by creating a wetland area containing special bacterial which break down the harmful chemicals in the polluted water as it passes through. The project was so successful that it won a major European conservation award.

A second role for universities highlighted by the Sustainable Development Education Panel was the deployment of university expertise to facilitate the implementation of sustainable development. There are a number of university research centres involved in the community activities necessary at local level to engender sustainability. University staff are also a large presence in other regional forums concerning sustainable development, in particular Local Agenda 21 steering groups.

The Sustainable Cities Research Institute (SCRI) at Northumbria University aims to develop and promote sustainable approaches to urban living and carries out research and consultancy at regional, national and international level, including substantial research under the EU Framework Programme.

The Institute for Research on Environment and Sustainability (IRES) is a multidisciplinary research Institute, established at University of Newcastle to foster and promote the University's internationally recognized expertise in environmental and sustainability research through interdisciplinary studies of the urban, rural and marine environments.

One of the major contributions of the University of Newcastle towards environmental sustainability is its new Devonshire Building which was completed in 2003 for the Institute for Research on Environment and Sustainability and E-Science Research Centres. The building boasts the highest standards of environmental sustainability. With natural climate

control and ventilation systems, it harvests renewable energy on-site using geo-thermal heating and cooling systems.

Other research teams in the North East are also active in undertaking research into sustainability. Durham has a cross-faculty research team, the Centre for Environmental Thinking and Awareness, which seeks to transfer ideas between different research perspectives. As well as social research interests in sustainable development, there are many research teams in universities in the North East that have made the transition from a narrow focus on environmental science to a much broader interest in environmental components of sustainability.

Durham has an Environmental Research Centre bringing together hydrologists, geographers, ecologists and methodologists to improve understanding of the way the environment operates and the anthropological influences upon that environment over time. Other research centres with a similarly focused mission include the Centre for Land Use and Water Resources Research at Newcastle University and the Centre for Marine and Atmospheric Sciences at Sunderland University.

## **Social inclusion and sustainable development**

There are several sustainability research institutes/explicit sustainable development facilitation organisations in the North East. They are strongly involved in sustainability governance at the regional scale. Sustainable Cities at Northumbria University has evaluated the three main strategies for the region – the regional economic strategy, the single programming document and the regional planning guidance – to see where there are environmental and sustainable statements.

During its operation the Centre for Sustainable Development at Sunderland University carried out sustainable development demonstration projects that are relevant at the level of individual businesses and organisations. It specialised in business and sustainable development and also community involvement. The centre formed a large cross-sectoral stakeholder partnership that had the aim of assisting the region to move towards sustainable development. The Centre for Environmental Informatics at Sunderland currently conducts innovative applied research into private and public social, ethical and environmental accountability, and provides the secretariat for USER, the University of Sunderland Environmental Report.

## **Sustainability and the business community**

Universities have a role to play in sustainable development in the region by offering advice and services and support for the business community. Most universities in the region have established independent firms or consultancies to provide environmental services to regional businesses. A selection includes the following:

Established with assistance from the European Regional Development Fund, Durham University's NECESI is an environmental technology and research support service. NECESI's core objective is to aid the transfer of knowledge and resources from the University to help the region's industry respond to environmental matters. Over the past five years NECESI has worked with over a hundred companies. Projects range from environmental problem solving to in-depth research and development, such as the consortium of regional industry, UK and European universities, including Durham's Department of Chemistry, which is developing new products from biodegradable and waste materials as part of a €1.2 million CRAFT project. NECESI seeks to embed environmental best practice in daily operations. They assisted the Port of Tyne Authority to develop an environmental management system and implement a range of environmental initiatives. The Port went on to win the North East Business Environment Award in 2004. NECESI's award-winning environmental training programme, developed with Newcastle-based The Environment Practice and funded by the Learning & Skills Council, will train 200 people from over 50 North East based companies in environmental awareness and management.

Integra Environmental was established by the University of Sunderland in 1993 and has developed a national reputation as a consultancy providing environmental training and advice to the business sector. Its three main areas of activities are: environmental management systems; health and safety management; and social accounting. Integra also offers European regional development fund-subsidised training and consultancy courses for local small and medium-sized enterprises. It recently won the contract with the national Environment Agency to deliver a foundation course of International Environmental Management and Assessment in environmental auditing.

Environmental Consultancy Services, Northumbria University offers consultancy, contract research and training services, with a particular emphasis on urban and organisational environmental management. It offers training courses on a range of environmental issues. Areas of activity include sustainable business practice; environmental impact assessment; environmental management; waste minimisation; and training in environmental management. Recent projects have included an environmental strategy for the main airport in the region.

Northumbrian Environmental Training and Research Centre, Northumbria University, is a training, consultancy and research unit which has been established within the department of chemical and life sciences at Northumbria. Northumbrian Environmental Training and Research Centre carries out analytical and environmental consultancy services, and contract research and development.

The Clean Environment Management Centre based at the University of Teesside is a interdisciplinary environmental research centre and is jointly funded by the European Regional Development Fund and the University. Its expertise is in the areas of environmental innovation through product development, manufacturing processes, eco-building and industrial symbiosis. Some of the major projects have included implementation of Industrial Symbiosis Programme in the North East jointly with Centre for Process Industries, which is a part of UK Government's £13 million funded National Industrial Symbiosis Programme. This is particularly focused at the regional companies coming together to utilise the by-products from each other to maximise resource value and minimise flow to and from the environment. The Environment Technology Transfer Club is another initiative at the centre for support of regional companies, which currently has a member base over 130 organizations both regionally and nationally from industry as well as the public sector, who meet to discuss mutual issues related to environmental management systems, regeneration environmental project funding.

In addition, the universities in the region have been involved in developing renewable energy projects. Senior staff at the Universities of Sunderland and Northumbria are involved in Renew North, a regional initiative to promote renewable energy. Northumbria University has been particularly active in pioneering photo-voltaic cell technology.

The Recycling to Land, Research and Advisory Centre in the University of Newcastle has performed a number of projects driven by the European Community Landfill Directive. The centre has the remit to service small and medium enterprises to offer free advice, guiding them into research to make companies more competitive and to save money. It seeks to encourage companies to redirect waste away from 'holes in the ground' and turn it into useful waste products.

## **Community service**

The student body is a significant contributor through volunteering and community activity in the region. At the University of Sunderland, students have been heavily involved in sustainable development. In July 1995, Community Environmental Educational Developments – a student-led registered charity, based in the university's school of environment – organised the first National Student Conference on the Environmental Responsibility of Students in the UK. This was in collaboration with the University of



Sunderland, the University of Sunderland students' union, the National Union of Students, the Co-operative Bank and WWF-UK.

At Durham University, there are student representatives on the Environmental Working Group, and there are means for students to become connected to other organisations with an interest in sustainable development that deal with the university.

The Clean Environment Management Centre at the University of Teesside believes community action is an effective way of delivering sustainability and improving social cohesiveness. It is working on several community based projects. Future Cities one of them, an innovative series of workshops designed to enable school children in Newcastle to learn about sustainable lifestyles and what this could essentially mean for their city now and also in the future. Middlesbrough Vision, another school based project which has been funded by the Industry Nature Conservation Association and developed in partnership with Middlesbrough Environment City, a locally based NGO, addresses several aspects of waste management issues. Marske Community Composition Project is a feasibility study to establish the viability of a community composition scheme for the coastal town of Marske.

### **The Regional Sustainable Development Round Table**

Each region in England is required to formulate a framework for the implementation of sustainable development in the region. In the North East this body is called Sustaine and has been actively supported by staff from the universities, notably the Sustainable Cities Research Institute at Northumbria and the Centre for Sustainable Development at Sunderland.

## Conclusion

<p><b>Strengths</b></p> <p>Some universities take a pro active role in their local communities e.g. community education / developing student volunteering</p> <p>Premiership football is major key to recruitment of students. Universities have links with their football clubs.</p> <p>Many social campaigns have their origin in HE student activity – Fair Trade, Make Poverty History</p> <p>Universities key to supporting the arts cluster (including sport)</p> <p>Graduates have been key to creative industries development and ‘place’ factors e.g. creative quarters and major physical re-developments - Digital City (Teesside), St Peters development (Sunderland), Great North Museum (Newcastle), Manors (Northumbria)</p> <p>HEIs have inside / outside role - porous. Create events, create audiences</p> <p>On the social side, the enormous strength of Newcastle and Durham in Medicine and the Schools of Health in the other universities can benefit the health of the region</p> <p>The contribution of the universities was good and getting better. They contribute to a lively and vibrant environment, especially bringing in students from all over the world helping create a more cosmopolitan environment</p> <p>Physical developments – HEs as examples of best practice in building their buildings – adopting BREEM etc. lots of examples</p> <p>Universities as key actors in Sustainable Development agenda in the North East e.g. Round Table</p>	<p><b>Weaknesses</b></p> <p>Fractured nature of community and voluntary sector makes engagement difficult</p> <p>Perception of Universities as ‘elite’ hinders relationships</p> <p>Students can be a cause of social problems : may be an inherent distrust</p> <p>Introspection of universities – not their core business</p> <p>Needs significant external funds to be visible and effective</p> <p>Too many hidden jewels ( social, cultural and environmental)</p>
<p><b>Opportunities</b></p> <p>Students as local actors in social debate</p>	<p><b>Threats</b></p> <p>Planning issues : zoning for e.g. student</p>

<p>and activities.</p> <p>SME Start-up Company potential</p> <p>University access to key champions &amp; national decision makers eg Lord Puttnam</p> <p>Design agenda will create new opportunities</p> <p>Ability to nurture the elite ( also can be a potential weakness - elitism)</p>	<p>accommodation</p> <p>Town v Gown</p> <p>Very vulnerable to funding issues / dependent upon altruism / more focus on market orientated activities. Cultural activities not recognised in mainstream funding streams</p>
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## CHAPTER VI: CAPACITY BUILDING FOR REGIONAL COOPERATION

### ***Mechanisms to promote HEI-regional involvement***

#### **Identifying regional needs**

The Government's decision to set up RDAs with responsibilities which include economic development, skills and science and innovations created opportunities for HEIs to develop and fund their work in the regions. The key strategic framework in the region which identifies the needs of the region is the Regional Economic Strategy developed by the regional development agency. Whilst this does identify some ways in which the universities can benefit the region, the emphasis has been on the universities arguing for a stronger place in the regional support structure. The engagement of the universities in a regional agenda predates the availability of supporting funds from the region and generally the universities have led in identifying new roles, as well as in helping to develop the region's strategy.

So whilst the previous RES (currently about to be replaced by a new document which is out for consultation) incorporated the universities in a key objective to 'place universities and colleges at the heart of the region's economy', the initiative for this came from the universities rather than unprompted from regional partners. The new RES does not have such a singular emphasis on the role of the universities but sees them as contributing across a wide range of themes throughout the document.

Following the development of the previous RES, the RDA and the university vice-chancellors signed a compact. It stated that:

"The Compact is about three objectives that we believe will help to raise the standard of living in our Region:

- *Developing a Learning Region*  
We will work together to:
  - widen opportunities to learn
  - increase the level of knowledge and skills throughout the Region's workforce
  - help to raise standards of living, more access to better health, welfare, leisure and arts facilities, and an improved environment
- *Stimulating new knowledge-based business*  
We will seek to:
  - create new jobs by using discoveries made in our universities to improve current business performance and to develop new sustainable business
  - help university staff and students to set up new enterprises
- *Working together for the benefit of the Region*  
We will work together to:
  - secure extra revenue for the Region, for research and development, learning, community and economic development
  - share ideas and improve synergy

These processes are designed to establish the North East as a Learning Region with a sustainable knowledge-driven economy and an enhanced profile in national and international markets."

Since then all the universities have actively sought funding for various activities from the RDA “Single Pot” budget made up of contributions from several central Government departments within the framework of the Regional Economic Strategy.

The contribution of the universities to the region and the underlying knowledge resources of the region have been examined through a wide variety of audits and studies over the years. Perhaps most notably these have included the Regional Mission report on the universities in 2001, the Arthur D Little study on the research base, and a host of sectoral and cluster studies, studies on the regional graduate labour market, evaluations of various policies and funding programmes, etc. It is perhaps fair to say that the region is not necessarily good at making use of this intelligence and there is a tendency for reports to be unpublished or forgotten. Hopefully this situation will improve with the formation of the North East regional information partnership, which has a membership of nearly 50 partner organisations who have committed to share research and information in order to improve policy making in the region.

The response by the universities to the strategic needs of the region is supported by a variety of funding streams. From the region the main funds are the resources of the regional development agency itself and the Structural Funds which are managed by the agency on behalf of the regional partnership. National government additionally provides funding direct to the universities in the form of the HEIF and other specific third strand programmes (described in detail in chapter 3 above).

In the 2004 Spending Review the Chancellor reaffirmed the Public Service Agreement (PSA) to make sustainable improvement in the economic performance of all English regions by 2008 and, over the long term, to reduce the persistent gap in growth rates between the regions, demonstrating progress by 2006. The allocation to the North East RDA was maintained in real terms and new responsibilities devolved. By 2007/8 it is estimated that there will be an increase of 40% in their budget bringing over £258m to the North East. There was a particular increase in the contribution from DTI which was consequent on a decision to devolve responsibilities for Business Link services to RDAs, the distribution of new responsibilities for R&D grants and enhancing their role in support of the Lambert Review’s recommendations on business-university collaborations. The Government also asked RDAs to support other business collaborations with the university research base in each region.

In March 2005 the Government published a second White Paper on Skills which significantly increased the role of HE in the provision of employment related skills than its predecessor had done in 2003. Not only did that specify that additional student numbers would take account of regional priorities, but also that intervention might be necessary to ensure the continued provision of subjects that were vulnerable and of strategic importance to the regions. HEFCE has now decided to support partial market led solutions to this latter issue, but the possibility of selective intervention as a last resort has been left open. In relation to partnerships for delivery, the March White Paper also invited Regional Skills Partnerships to “review how higher education can best be integrated into the work of RSP,” stressing the importance of progression from FE to HE and the stimulation of business support for postgraduate studies and university research which benefits the skills agenda and economic development in the region.

It can be seen from all these initiatives that the Government is seeking to enhance the joint working of RDAs and universities in supporting regional development. Consultation in DFES and the Treasury for this report confirms this position. Employer engagement with HEIs in regions has been identified as a priority area to be further developed to help achieve this. However as yet there has been little resource made available from DFES to HEIs to support their enhanced expectation of regional contribution.

Despite the fact that the first RES in the NE defined a clear role to the universities “at the heart of the region,” in practice this proved difficult to realise. There were misunderstandings as to the meaning of the statement and whether the universities were to be seen as an important business sector in their own right or as a set of institutions whose role was to

support other regional initiatives. These misunderstandings manifested themselves in a number of ways including the nature of the contribution of the universities to the RES, how these activities were to be brokered and the availability of funding to attract their involvement.

From the start there has always been a Vice Chancellor on the Board of ONE RDA, however this had been a personal appointment not having a requirement to report back to the other institutions, though in practice this usually occurred. Unis4NE actively tried to ensure that the HEIs were represented on the relevant groups and committees established by the RDA, however the diversity of interest represented by the membership meant that some times it could not give a collective view on behalf of its membership or commit collectively to engagement. Much RDA/HEI interaction naturally occurred bilaterally and there was a lack of clarity about what business could be done collectively and what individually with each university.

In June 2005 a special meeting was held between the Unis4NE Board and ONE's Senior Management Team. It agreed a regular programme of meetings, areas of HE contribution to the RES, clarity on issues to be dealt with individually or collectively and protocols for action. Hopefully these decisions might go some way to reduce confusion on these issues in the future.

One significant factor in the success of the relationship has been the degree of willingness of ONE to fund HE related activities. This proved problematic in the Science and Innovation area by the decision of the RDA to invest most funding into intermediary bodies, five Centres of Excellence supported by a new Science and Industry Council, under the Strategy for Success. The requirement for a strong industry focus made the process of accessing funds and project development and management very slow and bureaucratic for the universities, and indeed for the agency itself. Another factor was that 75% of the agency's resource had been delegated to the sub-regional partnerships to manage. The success of HEIs in accessing such resources depended very much on their ability to convince their local stakeholders on the value of investments in HE to that local area. In practice this proved easier in the south rather than the north of the region.

## **Reviewing and evaluating the success of regional engagement**

There is no formal process for reviewing current engagement arrangements in the region, although recently the RDA has set in place a regular programme of strategic level meetings between the directors of the agency and the vice-chancellors of the universities, with the intention of regularly reviewing progress. There is no formal evaluation process in place.

Central government assesses some aspects of regional engagement through annual reports on its HEIF funding from each university and through the annual collection of data on business and community engagement. The higher Education Business and Community Interaction Survey has been undertaken now for four years using broadly the same set of indicators and questions. It is quite an extensive survey which in its original form ran to 8 pages with indicators on research collaboration, consultancy, intellectual property exploitation, spin off firms, student engagement with employers and participation in regional partnerships. The results of the survey have been published, most recently with regional tables, and will in future be made available for individual universities.

In addition there have been a considerable number of evaluations and studies, often identifying good practice. So the Active Community Fund which supports student voluntary activity has recently been reviewed and a set of case studies of good practice published by HEFCE.

## **Coordination and collaboration**

Coordination between the universities in the region is principally through Universities for the North East, although bilateral collaboration also takes place outside this structure.

The HEIs are largely independent of regional community infrastructures, although some partnerships have been made to share expensive regional infrastructures such as the use of the Sage Music centre for the delivery of music education. Generally the universities have their own facilities for student welfare, housing, sport and cultural facilities and hence the tendency is more for the universities to provide access to these facilities for community use. This particularly includes knowledge infrastructures such as libraries and laboratory facilities which can be used by the general public or regional organisations usually for some payment.

## ***Evaluating and mapping the impact of the regional HE system***

An impact assessment exercise is currently being undertaken.

Previously a report was developed called the Regional Mission as part of a set of nine regional reports on the role of HE in the English regions. This was published nationally by Universities UK and was circulated to key partners and agencies in the region. A summary of this was produced by Universities for the North East.

## **CHAPTER VII: CONCLUSIONS: MOVING BEYOND THE SELF-EVALUATION**

This self-evaluation process has been highly valuable to the universities in the North East and to their relationship with their regional partners. It has provided an opportunity to engage with regional partners and business outside of the usual policy implementation fora, and has required consideration of perspectives which do not comfortably fit with the self-image of the universities.

It is clear that in the region there is not a uniform perspective on the universities and the merits or otherwise of their contribution. Universities feel that the full range of activities they undertake and the degree of cultural change they have undergone in recent years is not well understood by some regional partners. Regional partners still identify shortcomings in the universities and areas where they would prefer to see greater change. Both sides though recognise the importance of greater dialogue to improve mutual understanding. There is however a general view reinforced by the soundings at consultation meetings that the situation is improving and partnership is working better than before, albeit that some still think the grass is greener in other countries.

The region has benefited greatly from a positive attitude to regional engagement in all of the universities, and compares favourably with other English regions where there are individual universities that resist or even reject a regional role. The formation of a university association to coordinate regional engagement was much earlier in the North East than any other UK region, and Universities for the North East still has a wider remit and greater consensus than other regional associations. A particular strength is the recognition that whilst there is a mechanism for collaboration, not all activities need to involve all five universities, and there is a range of activities from those undertaken by an individual institution, through various combinations up to the full association.

The universities have also worked hard to strengthen capacity within the individual institutions for regional engagement. Regional development officers, outreach teams and the range of projects and mechanisms described in this report illustrate the commitments made by all the universities. At times the plethora of institutional mechanisms may lead to confusion and duplication, but it is also a source of strength in that individual initiative is supported and built into wider systems at a later date. Particularly important is the increasing emphasis on the role of the students through voluntary activities and through accredited learning in community engagement, as well as the contribution the universities make to the region's cultural life.

What is perhaps often misunderstood by partners is that universities are in general not required to engage in regional development, and that much of the activity reported here is discretionary activity undertaken in the public good. It may be funded by Government or regional partners, but rarely if ever covers its costs to the institution. There remain university staff that are committed to regional engagement and get involved because they feel it is an obligation. It is then hard at times for universities to accept criticism of what they are doing for the region by organisations for which it is their main or only purpose to undertake this activity, and which are forbidden by statute to step outside of their defined remit.

Despite this universities have begun to encourage staff to engage with business, although so far the emphasis is on removing the barriers rather than adding real incentives. Some institutions have included regional engagement and collaboration with business into promotion criteria. All have established infrastructures for managing engagement, and



including the creation of positions for academic staff with managerial responsibilities for engagement such as deans or directors of business development in schools and faculties. Part of the process of mainstreaming this activity is to ensure that academic staff can see a career benefit from investing time in this activity, and the opportunity of a deanship attached to this activity is a signal that it is valued.

Another form of criticism levelled at universities concerns their contribution to business success. Numbers of spin offs, policies on IP, and employability of graduates are frequently criticised, often based on ideas and anecdotes emerging from the US. Recent evidence however shows that UK universities are much more effective at producing spin offs for a given level of research resource than US universities. Views on employability are often highly polarised within the business community. And few countries can point to universities with such a broad range of activity in support of regional engagement.

Indeed rather than focus on the actions of universities as such, a bigger emphasis should be placed on capacity-building in other organisations and communities in the region to develop an understanding of how HE operates and how best to utilise what the universities can provide. Some organisations have made steps towards this, assigning liaison staff, investing in building relationships and partnerships, and supporting expert panels and other means of gathering intelligence, but more could be done.

It is clear that there remain conflicting interests between universities and some regional organisations, and even among the universities. Some of these conflicts are not self-imposed but arise from Government funding rules or inherent conflicts between Government policies. An example of this is the tension between maximising performance in the RAE and undertaking practical research for local firms or agencies.

There also remain very real challenges facing the region and the partnerships between universities and regional actors. Although considerable progress has been made in the region in addressing some of its weaknesses, major problems remain such as worklessness, low entrepreneurship and low skills, all of which are issues which the universities could make some contribution to in partnership with regional and national bodies. Tackling these major problems will however need changes in culture and policy involving adaptation by all partners, and extensive dialogue will be necessary to facilitate those changes. The activities and evidence presented in this report shows some of the opportunities and some of the challenges to be faced, yet also a willingness on the part of both universities and regional partners to meet that challenge.

## **ANNEXES**

## Annexes for chapter 1

Headline<sup>1</sup> gross value added (GVA)<sup>2</sup> per head by NUTS3 area at current basic prices 1995 to 2002

	1995	1996	1997	1998	1999	2000	2001	2002
<b>UNITED KINGDOM<sup>3</sup></b>	11015	11683	12339	13023	13583	14239	14906	15614
<b>England</b>	10953	11591	12313	13085	13641	14185	14889	15633
<b>North East</b>	9015	9397	9834	10238	10571	10974	11530	12078
Northumberland / Tyne & Wear	9025	9470	9985	10510	10913	11437	12126	12814
Northumberland	8230	8468	8571	8778	8671	9065	9513	9986
Tyneside	9420	9931	10590	11277	11842	12425	13245	14002
Sunderland	8742	9215	9771	10193	10699	11210	11797	12530
Tees Valley and Durham	9002	9307	9647	9905	10153	10409	10805	11184
Hartlepool & Stockton	10588	10765	11135	11308	11365	11837	12011	12019
South Teesside	8471	8884	9414	9800	9902	10007	10068	10344
Darlington	10959	11397	11909	12094	12642	13285	14559	15176
Durham CC	8070	8350	8531	8767	9142	9283	9809	10400

Source: National Statistics [http://www.statistics.gov.uk/downloads/theme\\_economy/NUTS3\\_Tables\\_1-12.xls](http://www.statistics.gov.uk/downloads/theme_economy/NUTS3_Tables_1-12.xls)

<sup>1</sup> The headline GVA series for this publication have been calculated using a five-period moving average.

<sup>2</sup> Estimates of workplace based GVA allocate income to the region in which commuters work.

Table Manufacturing investment<sup>1</sup> by UK and foreign-owned companies

£ million		UK	NE	NW	Y&H	EM	WM	E	L	SE	SW	ENG	WAL	SC	NI
<b>Foreign</b>	1994	4,172	277	458	211	170	655	386	257	625	268	3,307	286	512	68
	1995	5,340	410	601	333	262	750	470	305	730	217	4,078	390	793	79
	1996	5,859	377	627	333	327	949	569	369	728	277	4,557	539	658	104
	1997	6,478	369	701	245	500	1,000	566	450	862	451	5,145	539	682	112
	1998	5,896	604	543	250	548	797	344	320	720	370	4,497	454	746	199
	1999	4,575	428	451	306	345	446	353	413	614	334	3,690	338	387	160
	2000	4,938	255	460	232	329	770	328	348	783	441	3,946	291	521	180
	2001	5,774	636	453	437	344	856	429	229	724	633	4,740	363	502	168
<b>Average (1998-2001)</b>	<b>5,296</b>	<b>481</b>	<b>477</b>	<b>306</b>	<b>392</b>	<b>717</b>	<b>364</b>	<b>328</b>	<b>710</b>	<b>445</b>	<b>4,218</b>	<b>362</b>	<b>539</b>	<b>177</b>	
<b>UK</b>	1994	9,518	348	1,493	1,061	875	1,004	804	690	1,093	669	8,037	505	725	251
	1995	11,428	453	1,883	1,147	1,048	1,153	908	868	1,292	881	9,634	690	846	258
	1996	11,977	608	1,923	1,279	1,058	1,330	906	789	1,231	959	10,083	595	980	318
	1997	13,579	774	2,050	1,487	1,162	1,482	1,035	849	1,286	977	11,102	888	1,212	378
	1998	14,086	648	2,331	1,604	1,128	1,366	1,115	870	1,512	1,004	11,580	901	1,183	422
	1999	13,320	540	2,084	1,209	1,231	1,493	866	1,028	1,574	1,031	11,057	665	1,227	371
	2000	12,105	486	1,824	1,260	965	1,244	1,103	787	1,378	893	9,940	689	1,124	352
	2001	10,384	548	1,592	976	942	933	1,009	686	1,101	860	8,646	500	957	281
<b>Average (1998-2001)</b>	<b>12,474</b>	<b>556</b>	<b>1,958</b>	<b>1,262</b>	<b>1,067</b>	<b>1,259</b>	<b>1,023</b>	<b>843</b>	<b>1,391</b>	<b>947</b>	<b>10,306</b>	<b>689</b>	<b>1,123</b>	<b>357</b>	

Source: DTI Regional Competitiveness Indicators 2004

1: See the ABI section of the National Statistics website for an explanation of methodology ([www.statistics.gov.uk/abi](http://www.statistics.gov.uk/abi)).

## Structure of the Government Office for the NE

Sponsor departments (at March 2005)	
Office of the Deputy Prime Minister	Department for Education and Skills
Department of Trade and Industry	Department for Environment, Food and Rural Affairs
Home Office	Department for Culture, Media and Sport
Department for Work and pensions	Department for Transport
Department of Health	Cabinet Office

Over the last 5 years the scope and functions of the Government Offices have been steadily strengthened. A central government analysis by the Performance and Innovation Unit (PIU) in 2000 established the case for the Government Offices to have a more active role in:

- providing a forum for other public bodies in the region to review their high level strategies and improve read-across by identifying mutual aims and removing inconsistencies or duplications
- working up proposals for greater regional and local discretion in how programmes are to be implemented
- influencing the spending review process, using regional data to illustrate key regional priorities
- the development of policy in Whitehall
- promoting stronger collaboration with the regional chambers/assemblies

Government Office for the North East (GONE) is headed by a Regional Director and its work programmes managed through teams of staff currently organised around six ‘business’ Groups:<sup>2</sup>

- **Communities Group** – responsible for the delivery of policies and programmes focused upon the Neighbourhood Renewal Strategy, National Drugs Strategy and Crime Reduction Strategy Home Office Crime Reduction Programme and the Developing Communities agenda.
- **Economy Group** - responsible for improving the economic performance of the region by working in partnership with One NorthEast, Culture North East and other bodies to enhance investment, innovation, technology transfer, skills, cultural development and enterprise
- **Environment Group** – responsible for the statutory functions in relation to planning, housing and transport and is responsible for promoting the sustainability, environmental and rural agendas. The group supports the new North East Housing Board and co-ordinates actions in the Sustainable Communities Plan.

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<sup>2</sup> [http://www.gos.gov.uk/gone/aboutus/business\\_groups/](http://www.gos.gov.uk/gone/aboutus/business_groups/)

- **Public Health Group** – to take forward the Department of Health agenda in the region. According to GONE, it is ‘leading the improvement of health by tackling its wider determinants, ensuring the protection of the population by overseeing arrangements for communicable disease control, environmental health surveillance and emergency planning, and securing the quality of clinical services by supporting the local NHS’
- **Regional Group** – responsible for regional and local governance, regional intelligence, communication, regional strategy integration and the new role concerned with regional resilience
- **Children and Young Persons Group** - responsible for delivering policies and programmes focused upon Supporting Children and Young People and education and adult skills. Initiatives include the Sure Start Children’s Fund, Transforming Youth Work and work on ‘Every Child Matters – Change for Children’

## Annexes for chapter 2

*Table : Numbers of students (full-time and part-time in UK HEIs)*

	UK PG	OS PG	UK UG	OS UG	All
1995/96	287695	82424	1236053	113922	1720094
1996/97	285843	77729	1272272	120335	1756179
1997/98	305069	81932	1281731	131332	1800064
1998/99	314562	88778	1311910	130507	1845757
1999/00	313140	95480	1318530	129180	1856330
2000/01	337335	111365	1422425	119505	1990630
2001/02	349425	120425	1493895	122330	2086075
2002/03	357335	140165	1542515	135100	2175115
2003/04	367275	156550	1580110	143500	2247435
% change	0.276612	0.899325	0.278351	0.259634	0.306577

Source HESA. Note overseas here includes non-UK EU students who currently pay the same fees as UK students.

*Table : Applications and accepted places through the UCAS system for UK undergraduates*

	2000	2001	2002	2003	2004
Applications	1,943,181	1,959,879	1,978,659	2,046,131	2,098,710
Applicants	442,028	453,833	461,365	476,467	486,028
Accepted applicants	339,747	358,041	368,115	374,307	377,544
Main scheme	273,863	292,269	304,096	308,435	317,496
Extra				2,463	2,621
Clearing	45,421	43,257	39,757	38,666	34,862
Direct entrants	20,463	22,515	24,262	24,743	22,565
Applications to acceptances ratio	5.7	5.5	5.4	5.5	5.6
Applicants to acceptances ratio	1.3	1.3	1.3	1.3	1.3

Source UCAS

### **Regional factors taken into consideration in the location of new institutions, UGC 1961**

- A lessening of the need to locate universities in centres of population due to high maintenance grants and mobility, but a broad balancing against regional demand at the level of England, Wales and Scotland.
- Enthusiasm from localities and a proactive approach from local sponsoring groups. The Committee states that ‘The interest of the community is essential if a university is to successfully carry out its purposes. Without such interest its development could be frustrated.’ And hence the Committee decided that ‘the new universities should be sited in communities that were not so small as to run the danger of producing a closed university community.’

- The level and nature of local industries and existing research organisations that could be of advantage to the universities.
- Material evidence of support in terms of financial assistance.
- Sites that could hold all the activities of a university, of not less than 200 acres, preferably more, within two to three miles of a town centre and with good transport communications.
- A supply of accommodation in the area for students.
- The attractiveness of the area to academic staff and their families, including good communications with other universities, adequate housing and good schools. (UGC, 1961)

## The five universities

**The University of Durham** was founded in 1832, and developed in Durham and Newcastle until 1963, when the independent University of Newcastle upon Tyne came into being. The University is based at two locations: the city of Durham and the Queen's Campus in Stockton which was opened in 1992.

Overall student numbers have increased to 13,864 of which 12,561 are full-time and 2,843 are post graduate. The University has strong international links and an overseas student population of 1,700. The University directly employs 2,237 people and, in 2003/4, had an annual turnover of £153m. The University recruits high quality students, achieves high course completion rates and produces high quality graduates who are much sought after by employers. The graduate destination rate is bettered only by "Oxbridge" and Imperial College London, among the UK's "top 10" universities.

Durham is one of the UK's leading research universities. The Times newspaper university league table ranks Durham 8th in the UK (the highest placed university in the North East) and the Times Higher Education Supplement (THES) research league table, based on the UK's most recent research assessment exercise (RAE 2001) places Durham 12th in the UK (the highest placed research university in the North East). The THES recent world science league table ranks Durham 2nd in the UK and 18th in the world for the impact of its published science research.

Durham University has extensive and expanding collaboration with businesses nationally, internationally and at regional level.

It is one of the UK's top six sporting universities, with an excellent record in the British Universities (BUSA) competitions, winning over 170 titles since 1964.

The University's vision is that, 'We will be internationally recognised as a world class research university. We will build the research strength necessary to become world leaders in selected subject areas. We will work to enhance the distinctive student experience we offer to all our students, while diversifying our student body. We will enhance our international profile, while remaining mindful of our important contribution to the North East region. We will achieve this in a sustainable manner which secures our future development.'

The University is responsible for a number of listed and historical buildings including being joint guardian of Durham's World Heritage site, which comprises the Castle and Cathedral.

Durham's colleges record over 150,000 conference and tourist bednights a year, making them the second largest residential business conference venue in the UK. This brings in an estimated £10m to the local economy pa, safeguarding 650 jobs.

**The University of Newcastle** can trace its origins to a School of Medicine and Surgery (later the College of Medicine), established in Newcastle in 1834, and to Armstrong College, which was founded in the city in 1871 for the teaching of physical sciences. These two colleges

formed one division of the federal University of Durham, the Durham Colleges forming the other division. The Newcastle Colleges merged to form King's College in 1937 and, in 1963, when the federal University was dissolved, King's College became the University of Newcastle upon Tyne.

Sustained expansion since 1945 has resulted in the development of a modern University campus, around the original Armstrong College buildings, on a 45-acre site close to the centre of Newcastle.

Newcastle is the largest university in the North East in terms of staff and income. The 4500 staff make the University the third largest employer in Newcastle. The University's turnover is currently approaching £300 million and it accounts for almost 60% of all university research income in the region. The University has a worldwide reputation for its research and had 29 top-rated 5 and 5\* research units in the 2001 RAE, with the largest number of staff in 5 and 5\* units in the region. The University was ranked 15<sup>th</sup> in the country on research power, and has set an objective of improving on this position in the next RAE. In particular the medical faculty was the only one in a civic university to have all 5 and 5\* grades, and with an aggregate teaching quality score of 143 out of 144 is seen as one of the best medical schools in the country.

The University's mission is 'To be a World-class research intensive university, to deliver teaching of the highest quality and to play a leading role in the economic, social and cultural development of the North East of England.'

**Northumbria University** is modern in delivery and outlook, but with an established tradition of providing relevant, high quality higher education programmes regionally, nationally and internationally. It operates from two major sites in Newcastle, one in the urban centre and the other, a suburban campus to the east of the city. Northumbria can trace its origins back to the latter part of the nineteenth century.

Offering programmes in arts and design, the humanities, technology and science, business and social sciences, the Polytechnic achieved Accreditation (the power to award its own degrees) in 1987, and was inaugurated as Northumbria University in September 1992. In 1995 the incorporation of the College of Health Studies brought all healthcare education into the fold. This established Northumbria as a major player in the economic, social and cultural development of the North East region.

Northumbria's reputation as a leading provider of Higher Education (with an average TQA score of 22 out of 24) has enabled the University to establish a successful profile overseas, with over 2500 students from outside the UK studying here (and another 3000 studying abroad). Valuable partnerships have been set up with institutions and organisations in over 90 countries worldwide.

The timely acquisition in 2005 of the Manors site, adjacent to the existing City Centre Campus has provided the opportunity for the University to develop a Newcastle based Headquarters appropriate to one of the UK's leading modern, international universities. In particular the Schools of Design, Law and Business will be relocated in September 2007 in purpose-built accommodation.

Northumbria University has matured, during 130 years of growth, from the acorn of Rutherford School of Science and Art into an organisation with roots in the region, branching out to the world at large. "Scientific and technical education" has expanded to embrace other vocational areas such as nursing, sport science, business, design and law.

The University has a turnover of nearly £150m (04/05) and employs 2,500 staff. There are ambitious growth plans, especially through the increased recruitment of overseas students, through a combination of distance learning and attracting students to study at the enlarged campus in Newcastle. Northumbria was named by The Times as Best New University in 2005 according to league tables covering all aspects of higher education



The University's Mission is to meet the diverse needs of an international learning community and to contribute to society and its economic development through research, excellent teaching and high quality student support.

Northumbria's Vision is to become one of the world's leading teaching and learning Universities, renowned for its innovation and research-based practice and exercising its regional, national and international role through an extensive network of locations and partnerships.

**The University of Sunderland's** modern roots lie in the municipal technical college, opened in 1901. It was the first English college to introduce the 'sandwich course' - enabling engineering apprentices to gain higher qualifications whilst working. In 1969 Sunderland gained one of the UK's first three polytechnics, with the amalgamation of the municipal technical college, the School of Art and – in 1975 - Sunderland Teacher Training College. The polytechnic became a university in 1992 during a time of major celebrations in Sunderland, which also became a city during the same year.

The University has national excellence ratings for teaching in many of its subjects. It has a total student population of 9,046 full-time students and 6,804 part-time students. A striking feature is that almost 65% of its students are local to the northeast region. It also has collaborative arrangements with 56 UK institutions including 30 foundation programmes with regional organisations. As a result the University is a national exemplar for widening participation and has held the record as the best university for widening participation for the last five years, taking in the largest percentage of students from low-participation neighbourhoods of all universities in England and Wales. In addition to serving its region 1 in 10 of its students are overseas students drawn from over 57 countries adding cultural diversity to the City.

The University has been an important feature within Sunderland during the structural decline of shipbuilding and coal mining. With over 1,600 employees it is now the 3rd largest employer in the Sunderland area. In 1992 work began on the University's St Peter's Campus as part of a 15-year master plan to accommodate rapid expansion in the student population largely built on derelict former industrial land. To date development of more than £30m has taken place to provide first class teaching and research facilities and an incubator building as part of Sunderland Science Park. In addition the University is also improving its City Centre Campus on Chester Road and contributing to urban regeneration in the city centre.

The University was recognized as the best new university for research at the last RAE and has particular strengths in developing external research income and engaging with industry, including SMEs, in knowledge transfer activities.

The University's mission is "to be recognised as one of a new generation of great civic universities – innovative, accessible, aspirational and outward looking; with international reach; and with remarkable local impact".

The **University of Teesside** was originally founded as Constantine College 75 years ago, and was officially opened by the Prince of Wales, the future King Edward VIII, on July 2, 1930. The college became a polytechnic in 1969; and in 1992, the Privy Council Office gave formal approval to 14 higher education institutions, including Teesside, to become new universities. The single-site campus in the centre of Middlesbrough still includes the original Constantine College building but the University has grown more than twenty-fold. The past few years have seen investments of over £80m in new capital developments on campus.

Teesside Polytechnic developed at a much more cautious pace than many other polytechnics in the 1980s and at the onset of university status had a student body of only 8000. Leaving local authority control in 1989 signalled renewed growth; and the 1990s proved to be a time of dramatic expansion. Student numbers continue to grow year on year, with a current population of 20,300 of whom 11,000 study part-time. Its key growth areas include

Professions Allied to Medicine, visualisation and forensic science, all of which are founded on strong working relationships with employers and business.

The University employs some 1500 staff. It has a very good relationship with its Tees Valley partners, and its position in the Tees Valley as the major HE provider is recognised as a critical asset in the development of the Tees Valley economy. Its contribution to knowledge transfer has been recognised both regionally and nationally over the past 10 years, most notably with record awards from the Funding Council's Higher Education Innovation Fund in 2004 to support delivery of an ambitious enterprise strategy.

Teesside's mission is "Providing Opportunities – Pursuing Excellence: Enabling individuals and organisations to achieve their potential through high quality learning."

The University's vision is:

"To achieve wide recognition regionally, nationally and internationally as being among the top UK institutions for higher education for:

- a real and ongoing commitment to social inclusion and widening access to higher education;
- pursuing excellence and seeking to enhance academic standards and the quality of the student learning experience;
- contributing to the economic, social and cultural success of the Tees Valley and to the wider regional, national and international communities we serve."

## **The Contribution of the Open University to the NE Region**

### **The OU as a National HE Institution**

The Open University is the largest University in the United Kingdom, with over 220,000 part-time students studying with the OU. As well as its base in Milton Keynes the OU operates out of 13 Regional Centres in each of the English Regions, Wales, Scotland and Northern Ireland. It was the first HE institution to offer open and distance learning, a model which has been adopted throughout the world. The courses are produced by academic faculties which are based at the headquarters at Milton Keynes. The production of courses through a variety of media is undertaken by course teams, and the quality of these materials is undisputed. The Open University was rated fifth among all UK universities by The Sunday Times in 2004 for teaching quality and came top of the 2005 Student Satisfaction Survey. The teaching, is mediated through the Regional Centres, which provide the interface with students through the provision of student support, the management of associate lecturers who deliver the OU course material to students and the management of assessment and examinations. In terms of quality assurance, The Open University is no different from other UK universities, but its national remit means that most academic activity – which other HE institutions can obviously offer locally – is focussed at Milton Keynes.

### **The OU as a Regional Institution**

The Open University in the North, based in Newcastle upon Tyne, is the Regional Centre which covers the North East of England and Cumbria. We currently have 6000 students studying with the OU in the NE England and 1,500 students in Cumbria. We have 55 staff based at our Regional Office and employ some 406 associate lecturers across the region. Each academic faculty of the OU is represented regionally by one or two Staff Tutors.

### **Lifelong Learning**

The original vision of The Open University remains as valid and meaningful as it did at the outset in 1969. We are open as to people, as to places, as to methods and as to ideas. We were the first institution to offer HE courses to students without previous HE entry

qualifications and continue to build skills development into our courses to enable such students to prosper. We are proud that a good third of our undergraduates come under this category. We also attract a larger proportion of students with disabilities and special needs who might otherwise not be able to attend conventional university. We have always been open as to age, taking students from 18 to over 80, thus engaging with Lifelong Learning before it became part of official government policy. There has been a substantial increase in numbers of 18-25s choosing to study with the OU without incurring large debt. The Open University in the North has also pioneered a scheme to involve high achieving school students in HE study, resulting in a change in the law to allow for Learning and Skills Council funding. This scheme fits well with government initiatives to stretch and challenge gifted students and has attracted interest at ministerial level.

A wide range of courses is offered at access, foundation, undergraduate and postgraduate level. Increasingly these are vocationally orientated such as the Teaching Assistants and Early Years programmes, PGCE, pathways in Social Work, Engineering, Business and Languages.

### **Regional Initiatives**

The Open University in the North involves itself in a variety of local initiatives, working with partners in HE and FE.

It is a core partner in the successful Music Centre for Excellence in Teaching and Learning bid which includes all five campus based Universities in the North East and the Sage Music Centre. It works with the Widening Participation Unit at Milton Keynes, participating in a range of Aim Higher initiatives to raise aspirations among disadvantaged groups. The Bridges to Learning project based in the North East has created national interest as it brings together the trade union Unison and the WEA with the OU to offer pathways in social work/care/hospital environments. We are an active partner in the developing North East Lifelong Learning Network. The Regional Centre also works with colleagues in the Open University Business School in providing learning support for staff of SMEs taking OU business courses in Northumberland.

### **Europe**

In addition the Open University in the North has responsibility for the management of Open University students based in continental Europe. We have 6,500 students studying in Europe in 25 countries. As such the Open University is the largest pan-European University operating across Europe, managed from NE England, teaching directly in Europe to the same quality standards as in the UK.

In order to deliver our European programme the Open University employs Country Coordinators in nine EU countries plus Switzerland. We also have service and academic partnerships with a range of institutions in Europe including formal links with the Open Universiteit Nederland, the University of Hamburg, the Carl Duisberg Centre in Cologne, FernUniversitat in Germany, UNED, the distance learning University of Spain and NETTUNO, the national Open and Distance Learning system of Italy.

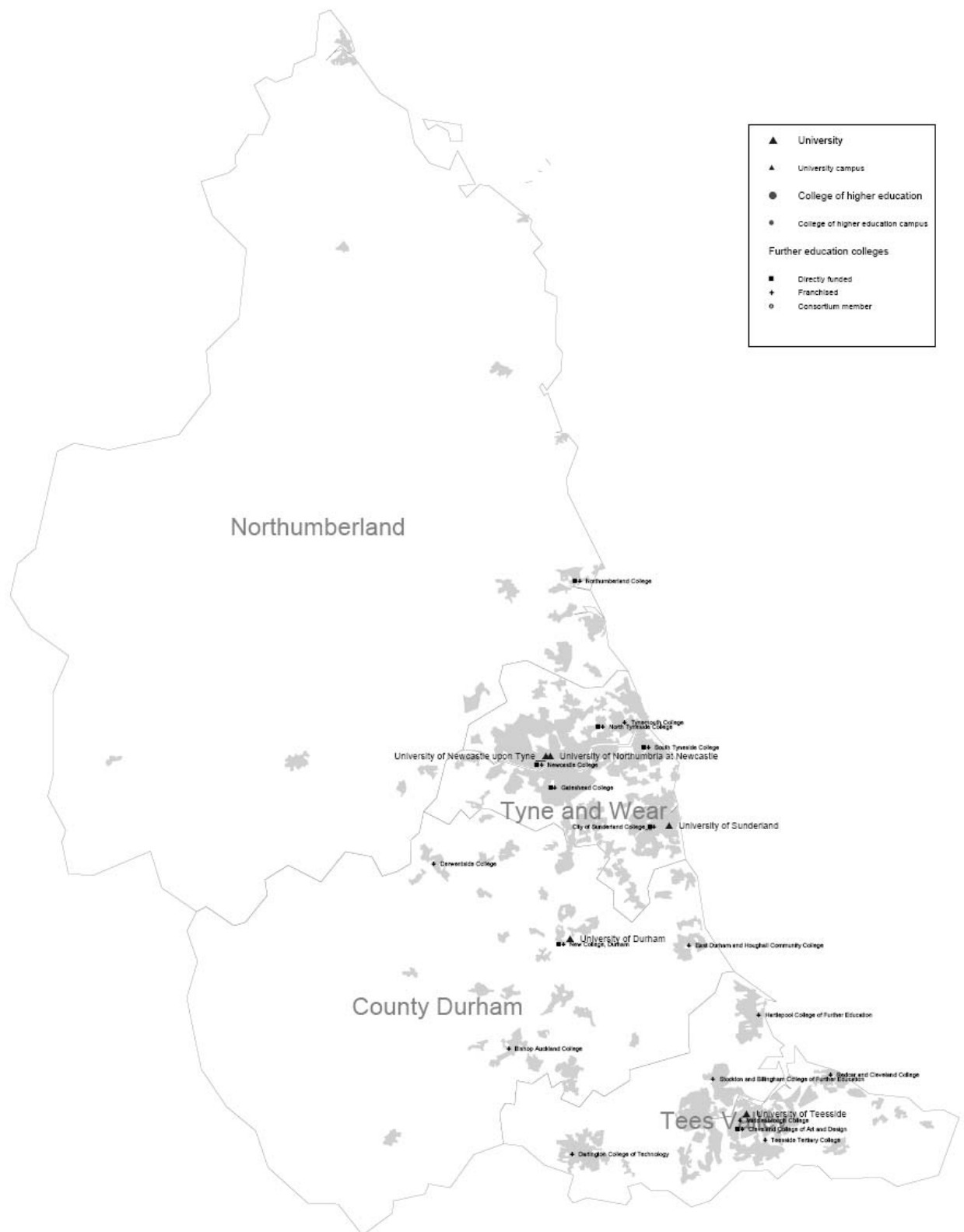
Through these partners, and through membership of the European Association of Distance Teaching Universities the OU in the North is engaged in working out the detail of the Bologna Declaration on the harmonisation of HE systems throughout Europe, thus contributing to the portability of qualifications, the employability of graduates and the implementation of the EU economic strategy.

The Open University Business School (OUBS) is one of only 21 Business Schools in the World that have triple accreditation from AACSB (USA), AMBA (UK) and EQUIS (Europe). OUBS has a European Coordination Centre in Brussels which is also the base of the Belgian Country Coordinator employed through the Open University in the North. In addition the Regional Centre works in close collaboration with the OUBS European Marketing Coordinator based in Brussels and OUBS Marketing agents working in other European

countries. We also make use of the North East Regional Assembly Office in Brussels to provide intelligence on European Higher Education matters for the Open University.

The Open University in the North works closely with colleagues in the Open University Business School on developing programmes in Eastern Europe, including Russia, Romania, Bulgaria and Hungary.

The Open University in the North has been operating in Europe since 1982. Over that time it has developed a unique set of skills in delivering open and distance learning across Europe and supporting students. Much of that expertise resides in staff based here in the North East of England and provides considerable added value to the economic activity generated by the normal higher education processes of open and distance learning of OU students in the North-East of England.



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### Annexes for chapter 3

Figure High scoring units of assessment in the 2001 Research Assessment Exercise for North East universities

University	4	5	5*
Durham	Earth Sciences, Computer science, Economics, Politics, Social Work, Sociology, Middle Eastern and African Studies, Asian Studies, German, Iberian languages, Music	Psychology, Biological sciences, Physics, Pure Mathematics, Statistics, General Engineering, Anthropology, Accounting, French, Linguistics, Classics, Archaeology, Philosophy, Theology, Education	Chemistry, Applied Mathematics, Geography, Law, English, History
Newcastle	Agriculture, Chemistry, Physics, Environmental Sciences, Applied Mathematics, Geomatics, Mechanical, Aeronautical and Manufacturing Engineering, Built Environment, Economics, Social Policy, French, German, History, Art and Design Education	Community-based Clinical Subjects, Hospital-based Clinical Subjects, Clinical Dentistry, Physiology, Nursing, Earth Sciences, Pure Mathematics, Statistics, Computer Science, General Engineering, Chemical Engineering, Civil Engineering/Marine Technology, Electrical and Electronic Engineering, Town and Country Planning, Geography, Law, Politics, Accounting, English, Iberian Languages, Linguistics, Theology	Clinical Laboratory Sciences, Psychology, Biological Sciences, Music
Northumbria	Psychology, Art and design		
Sunderland	English, History, Art and design		
Teesside		History	

#### Research power ranking.

Rank	University	Research Power
1	Oxford	100
2	Cambridge	91.8
3	UCL	81.2
4	Edinburgh	61.1
5	Imperial	58.7
6	Manchester	55.1
7	KCL	50.9
8	Leeds	49.3
9	Bristol	45.6
10	Birmingham	44.4
11	Glasgow	44.2
12	Sheffield	42.9

13	Southampton	42.1
14	Nottingham	42.0
<b>15</b>	<b>Newcastle</b>	<b>33.8</b>
16	Liverpool	33.5
17	Warwick	33.3
18	Cardiff	32.6
19	Reading	27.9
<b>20</b>	<b>Durham</b>	<b>27.2</b>

#### HEFCE allocation of teaching funds 2005/6

Institution	Teaching funds				Total teaching funding
	Core funding	Additional funded places	Widening participation	Other recurrent teaching grants	
<b>Universities</b>					
University of Durham	36,557,446	0	623,227	71,000	37,251,673
University of Newcastle upon Tyne	52,224,473	2,678,405	1,344,095	157,000	56,403,973
University of Northumbria at Newcastle	46,505,598	1,780,091	3,499,896	244,000	52,029,585
University of Sunderland	31,173,859	649,686	3,429,954	184,000	35,437,499
University of Teesside	34,275,864	2,791,534	4,707,934	130,000	41,905,331

#### HEFCE allocation of research funds 2005/6

Institution	Research funds		
	Quality-related research	Capability fund	Total research funding
<b>Universities</b>			
University of Durham	21,389,231	0	21,389,231
University of Newcastle upon Tyne	30,671,707	0	30,671,707
University of Northumbria at Newcastle	1,006,935	139,482	1,146,418
University of Sunderland	739,654	198,783	938,436
University of Teesside	217,418	285,591	503,009

#### HEFCE total grant and regulated UK undergraduate fees 2005/6

Institution	Moderation of teaching and research	Total grant 2005-06	Regulated fee income 2005-06	Total resource 2005-06
<b>Universities</b>				
University of Durham	0	58,640,904	12,294,175	70,935,079
University of Newcastle upon Tyne	0	87,075,680	13,806,910	100,882,590
University of Northumbria at Newcastle	528,496	53,704,499	12,484,840	66,189,339
University of Sunderland	0	36,375,935	7,286,205	43,662,140
University of Teesside	0	42,408,340	7,148,240	49,556,580

### *HEROBC objectives*

- a. Systematic and sustainable change within HEIs and in how they relate to business, particularly changes in institutional and academic cultures, to attach greater value to activities which are relevant to the needs of employers and business and which contribute to wealth creation and national competitiveness.
- b. Improved organisational arrangements and structures within institutions so that they are better able to respond to business needs, and to interact more effectively with business, including with small companies and with a range of bodies within the community which contribute to wealth creation and competitiveness more generally.
- c. Improved access to, and use by businesses of graduates and diplomats, products, resources and services produced in HEIs.
- d. More widespread, systematic and rapid transfer to businesses of new ideas, products and processes generated within HEIs. Technology transfer is a complicated matter, not the linear process as which it is sometimes portrayed, and the fund should go beyond this to include a range of interactions involving the transfer of knowledge more broadly.
- e. Improved relationships between HEIs and businesses at the personal level, using staff transfers and other mechanisms to encourage mutual understanding and the development of lasting working relationships, especially at the level where knowledge transfer takes place.
- f. Enhanced institutional capacity to respond in a concerted and effective manner to other initiatives promoting employability, enterprise and self-employment skills, particularly where knowledge transfer is concerned.
- g. Recognition of regional and national needs including those identified by Foresight.

Source: HEFCE 1999/40

### **Supporting an emerging North East automotive industry University of Sunderland - Institute for Automotive and Manufacturing Best Practice (AMAP), Graduate Retention in the Automotive Sector (GRASP), Digital Factory and Engineering Fellows.**

The location of Nissan near to Sunderland in the 1980s led to a number of important developments in university activities, starting in 1995 with the establishment of CAMM which eventually evolved into AMAP (Automotive Manufacturing & Advanced Practice). The close working relationship between Nissan (NMUK) and the university has evolved over this 10 year period and has led to a number of important joint activities such as GRASP (Graduate Retention in the Automotive sector) and a key role for the university in managing two out of the five regional NEPA (North East Productivity Alliance) projects – Engineering Fellows and Digital Factory.

The series of projects to support Nissan and its supply chain companies have involved:

- Training & staff development
- Graduate placement (modelled on the Teaching Company Scheme - GRASP)
- Benchmarking state of the art best practice to embed in companies
- Productivity improvements / improved competitiveness

Partners in these projects have included the University of Sunderland, NMUK, One Northeast, and other companies.

The University of Sunderland had been providing training in digital technologies for people from Nissan through its Institute for Automotive and Manufacturing Best Practice (AMAP) for many years. The university were keen to further develop their relationship and expand activities with Nissan and suppliers in the Northeast and were proactive in seeking new ways to utilise university expertise and resources to achieve this.



The university entered into a dialogue with NMUK and when the company identified opportunities for further skills development and business improvement projects they were able to collaborate, with support from the Regional Development Agency, One Northeast. This led to the development, in 2001, of a regional initiative (GRASP) based on the government's Teaching Company Scheme, piloted in NMUK and 10 of its supply chain companies. It was managed overall by the University of Sunderland and it involved 38 two-year graduate projects, 21 of which were with the University of Sunderland and the others with other Northeast universities. Funding was provided by One NorthEast with companies making substantial contributions (Total cost £6m).

The university was right at the heart of the strategic planning behind the scheme, negotiating the financial arrangements, scoping each individual project, supporting the advertising and graduate recruitment process, co-ordinating the involvement of the regional universities, undertaking the project management of the overall GRASP scheme and supporting the project management of each individual work project over the two year period. An independent audit commissioned by the university, estimated that the scheme had saved the companies some £11m over the two-year period and projected savings of £20m over the next 3 years after the end of the scheme. 36 of the graduates were retained in employment with the host companies or within the region.

At this time NMUK and a group of industrialists had established the North East Productivity Alliance (NEPA) to develop the North East's manufacturing strategy through improved productivity and competitiveness. Following the success of GRASP Prof. MacIntyre of the university was invited to become a member of NEPA's advisory board and the University of Sunderland were tasked with leading two out of the five funded NEPA regional projects, based around the proven expertise within AMAP. The projects are:

Engineering Fellows - aimed at developing a new body of knowledge for the region through engaging 8 senior engineering fellows seconded by regional manufacturing companies to conduct research into critical areas of engineering and manufacturing.

Digital Factory - to raise awareness of the benefits of digital technology and train employees of the region's manufacturing companies to take advantage of the most appropriate digital technology to bring about productivity improvements in their workplace.

The success of GRASP opened up whole new areas of partnership and collaboration and the university is now a key partner in other initiatives.

### **RCID (Resource Centre for Innovation and Design) – University of Newcastle**

One of the university's most successful outreach projects which has supported hundreds of local companies, the RCID was formed at the University of Newcastle in August 1995. Its continuing mission then was the support of innovation and design in the North East's SMEs. The Centre has been jointly funded by the European Regional Development Fund (ERDF), the University of Newcastle, and contributions from regional growth-orientated businesses.

The establishment of the Centre reflects industrial opinion that competitive advantage can be enhanced through industry-academic collaboration. It is recognized that product development through innovative design can be expensive and often dependent on scarce resources. The RCID group of companies understand that collaboration and sharing of resources between SMEs and the Universities are essential if effective research, development and technology transfer are to be conducted at the appropriate level of excellence.

The special requirements of those SMEs which include design and process or product development as part of their core business actively are addressed. Innovation includes creating new products and processes, devising new methods of managing these activities and enhancing the manufacturing and marketing functions. The combined strengths of Business

and the Universities bring together a critical mass of expertise, knowledge and resource which is capable of meeting the challenges to be faced. This sharing of skills and experience also enables the transfer of best practice and new knowledge between the participating companies.

Services provided include:

- advice and assistance on all engineering design issues to companies in both the mechanical and electrical sectors.
- the generation of ideas for new and improved products and new methods of manufacture.
- design work from concept to production. The use of 3D CAD ensures ideas can be rapidly turned into models for examination and analysis.
- the development of virtual prototypes and products with embedded behaviour.
- analysis packages used to study the performance of products and components prior to manufacture. Stresses, heat transfer, fluid flow and motion are all analysed on 3D virtual models.
- the design of electronic hardware and software across a wide range of platforms.
- value engineering and value analysis are undertaken to minimize the cost of new products and to reduce the cost of existing products.
- numerical modelling of systems and analysis of data.

### **IADET (Institute for Agility and Digital Enterprise Technology) University of Durham**

IADET capitalises on recent advances in computer modelling, graphic visualisation and distributed information management to add value in product development, realisation and associated risk mitigation in manufacturing. The digital enterprise technology group of IADET feed the leading edge research they are doing directly to IADET's Agility Engineers who translate it into the practicalities necessary for business enhancement. IADET's team of Agility Engineers help businesses develop the skills and tools that are essential for responsiveness and success in areas such as: manufacturing strategy; physical plant and equipment; product design and customer, and market. The way the project operates is that the team of Agility Engineers go into companies to assess the business and put together a bespoke package for the managers and workforce that will allow them to adopt practices which meet the changing demands of domestic and export markets and supports the companies in being more competitive/leading edge. Recent developments have also taken IADET work into the service industry for example into the Health Sector.

The project was launched in June 1999 and has been funded up until March 2005. Initially based on campus the team was relocated to new premises at NetPark (see separate case study). The overall aim is to assist North East businesses (manufacturing and service sector) to adopt best practice to make their businesses more "agile" so that they can cope with constant change and global changes. The project draws upon a variety of funds including ERDF, Regional Single Programme, Sub Regional Single Programme, SRB, and DTI-KTP

The project has been developed with collaboration from a number of North East and global businesses (e.g. BAE Systems; Boeing; Astrium; Delmia; Tallent; Black&Decker; Rolls Royce; MKL).

IADET maintains satellites within 3 areas of the North East Region – Derwentside, Sedgfield, and the Tees Valley. Each of these satellites has one to two dedicated IADET Engineers who respond to the needs of that specific area and are able to draw down from the whole of IADET. The satellite engineers are located within the respective local authority or their equivalent.

The tangible results of the project over the 1999-2005 period are, 272 companies assisted, 366 jobs created, 2921 jobs safeguarded and £29m in new turnover in companies.

As a more structured approach some of the initiatives have been joined up through local partnership in order to target the development of a specific sector. Both Teesside and Sunderland have been running a variety of initiatives to support the digital sector over a number of years. In both cases, support for research centre activity has been combined with training, entrepreneurship support and business networks. Similarly, as already described in an earlier case study Newcastle has been involved in a variety of projects to support the life sciences industry in the region.

### **DigitalCity University of Teesside**

Since the mid-90s the University of Teesside has run projects focusing on many aspects of digital technologies - business applications of virtual Reality (including the capital development); high-level training in digital technologies (CAGTA, games, animation, and the Graduate Enterprise in Multimedia programme); creative and cultural programmes for both professional and community groups; support for creative & media start-ups through Graduate enterprise; development of the Northern Region Film & Television Archive; New Technology Institute; Digital Knowledge Exchange. These are now culminating in the major DigitalCity initiative, that is bringing R&D, business development (including inward investment), business generation, fellowship and learning programmes together under one umbrella, supported by a wide public-private partnership including Middlesbrough Council, Middlesbrough Town Centre Company, Tees Valley Partnership, ONE, Government Office for the North East, plus private sector partners.

The aim of the project is to realise the Tees Valley's potential to generate and sustain a fast-growing, high-level economic base in the digital technologies sector with a world-class reputation for creativity and innovation.

DigitalCity is predicated on University expertise in digital technology, digital media and their applications. A strong focus on computing and digital technologies programmes (1500 students per annum in these disciplines) coupled with a track record in business generation (Graduate enterprise Programme) and a good relationship with the relevant sectors provided a clear opportunity to supply both the skills and the business development opportunities needed to stimulate high-level growth. Activities in other areas such as Meteor and creative and cultural skills have also made a strong contribution to the development of the project.

DigitalCity has been in development since 2003 as a start-up project, and in this phase has achieved some early wins that have helped to establish its credentials as a major strategic driver for the economy of the Tees Valley. Developed in the context of a Framework Plan agreed in early 2004 by all the major stakeholders, the initiative is founded on three major capital & revenue developments:

A) The Institute of Digital Innovation [IDI], sited on the University campus and the basis for the generation of R&D-based digital media and digital technology applications; creative content; new business creation; and the supply of talented and entrepreneurial postgraduates.

B) The Creative Industries Quarter [CIQ] around Queen's Square in central Middlesbrough, a nexus of refurbished buildings that will house new and growing digital and creative companies, including those moving on from the IDI. In addition to accommodation, new, growing and relocating businesses will have ready access to a tailored, specialist business development services designed to help them get the best out of their skills, know-how and market opportunities. This strand of activity will be led by a designated Business Champion and have strong links to the revenue activities in the IDI. This element is sponsored by Middlesbrough Town Centre Company.

C) The Museum of Digital Media, planned for the Middlehaven development, a major tourist attractor for both Tees Valley and the region that will exploit the digital expertise and knowledge available in the University and in the growing cluster. This is conceived as a more populist initiative and is sponsored by Middlesbrough Council.

The IDI is the first of these projects to be approved. Its operation will be based upon a wide range of initiatives already under way, and themselves founded upon a track record of delivery, including:

- Commercialisation activity, encompassing start-ups and spin-outs, along with co-locating businesses working alongside specialist teams to develop novel digital products, with support from a Proof of Content fund.
- DigitalCity Fellowships and Residencies, providing financial support and expertise for graduates and alumni of the region's universities to develop digital/media business ideas or portfolios of work to a point where they are commercially exploitable.
- Digital Learning, providing development opportunities for existing and potential employees in the digital technologies sector and using DigitalCity assets to promote career opportunities to people of all ages.
- Festival and Conference Programme, working in tandem with appropriate regional strategies to deliver regional, national and international promotion for the Tees Valley, its digital cluster and the University and to identify strategic partnership opportunities.

The project is aimed to contribute to regional development through the attraction of businesses and students, through the development of creative and entrepreneurial skills in fellows, enhanced image for the sub-region and region and strengthening of links between the knowledge base and industry.

Results so far from start up activity has included 12 companies (one spinout), 28 new jobs, 1 new inward investment with 60 jobs, and the establishment of a business network (first Wednesday) with 50+ members.

#### **Commercialisation of Medical Innovations (CMI) - Northumbria University**

This was a tripartite collaboration whereby medical innovations from the NHS or University were taken towards the market place by University designers working with local manufacturing SMEs. The project involved substantial consultancy support to the companies, some of which was over a prolonged period. The aim of the project was to deliver design expertise to enable regional SMEs to manufacture successful medical products.

The project involved partnership and in-kind contributions from the Regional Medical Physics Department of the NHS, and the NHS Intellectual Property (IP) Hub based at the Regional Technology Centre, as well as the manufacturing SMEs who were the main beneficiaries.

The work took place during 2002/2003 and was supported by an EU Objective 2 ERDF grant of £242K matched by University staff time and overheads as well as SME staff time.

Within the University, there was innovative collaboration between three Schools – Design, Engineering and Technology (now re-named) and Health, Community and Education Studies. This combined the knowledge of end-users (Health) with prototyping expertise (Engineering) and IP management, ergonomic, aesthetic and design for manufacture (Design).

The project provided an outlet for the commercialisation for medical product innovations from the public sector (NHS and University) and identified local SMEs who could make the products and create new markets for a key sector in the North East, but which is suffering from declining markets. 25 SMEs were assisted of which 8 were major in-depth consultancies (> 25 days). This comprised a total of 49 projects and 8 new products). The total number of SMEs assisted (25) was less than the target (43), but the overall impact was **double** the target. Turnover of companies increased by £5,194,265 versus a target of £2,576,000. Also, the number of **safeguarded jobs** in these firms was **28** versus a target of 13 jobs.

The project was most effective by working with a relatively small number of companies and supporting them over a long period of time so that the commercialisation could be realised. Thus, the impact was more important than trying to meet the original target of numbers of companies assisted.

The project was very encouraging in terms of both internal and external partnership working. The challenge was to find a financially viable model to keep it going. The financial package of the ERDF funding did not make it very attractive to the University in terms of the in-kind contributions that were required to match the grant. However, a more viable financial model has now been adopted as the exit strategy and enquiries are now dealt with as individual Knowledge House projects via Universities for the NE.

Partnership working with small firms was successful, but there is some loss of efficiency in eventually finding those SMEs who have the commitment and expertise to take a project forward as part of their business growth plans. This means that some partnership working can be relatively un-productive in terms of outputs, although very instructive to business in terms of design advocacy and the importance of design to innovative business practice. It is thus better to work with a small number of committed partners than spread the support thinly over a larger number of beneficiaries.

The internal partnership between three different and contrasting Schools was particularly encouraging and has led to a strategic cross-School commitment to develop this area of activity and exploit the synergies in association with the North East Centre of Excellence in Life Sciences.

This project is part of a much wider contribution to the region from the School of Design. It was announced in June 05 that a Design Centre for the North would be established in Newcastle Gateshead as part of the Northern Way growth strategy across the three northern regions. Northumbria University will play a major part in this venture, which will receive an initial investment of £5m from Northern Way Growth Fund. The University will be working with partners in the private sector and with Gateshead Council.

The RDA had already chosen Northumbria University to play a leading role in helping to develop and implement a regional design initiative, which will form a new strand in the revised Regional Economic Strategy. This not only includes product design as exemplified by the CMI project (above), but also service design and design innovation.

### **Knowledge House**

One of the specific projects to emerge from Higher Education Support for Industry in the North (HESIN) and carried forward into Universities for the North East, was Knowledge House (KH). The idea behind KH was that SMEs faced a range of barriers in accessing the knowledge resources of the universities which discouraged regional university/ SME collaboration.

KH was created in 1995 specifically to overcome these barriers, and to increase the amount of technology transfer taking place between local firms and universities. The purpose of the scheme was to create a structure which suited SMEs looking for help with a particular technical problem. The first barrier an SME faces in contacting a university in search of help is the lack of knowledge of whom to contact. Therefore, KH offered the benefits of a single point of contact for all five universities, plus the NE branch of the Open University. KH can be accessed via a central node, based at the Regional Technology Centre in Sunderland, or any of the five university nodes. The initial enquiry would then be sent out to the relevant people at all of the five regional universities, inviting them to suggest academics that could address the identified need. Each university has a co-ordinator responsible for ensuring that the leads are disseminated to the correct contacts. Ideally KH will be able to offer the SME a

choice of academic consultants and will facilitate a meeting for the firm's managers to meet with and select the most appropriate person for their needs.

Knowledge House has been funded through a series of phases, initially through the NE Region Objective 2 Structural Funds (ERDF) (£1,163,960 up to 2005), and more recently with funding from the HEFCE Higher Education Innovation Fund (£606,772 for 2004-5). This current HEIF funded phase runs from August 2004 to July 2006 and currently employs 13 FTE staff.

The project reports to the Board of Universities for the NE (the Vice Chancellors) and senior executive committees of the Universities for the NE consortium.

Overall management, monitoring, reporting and quality control of activities and interventions has been facilitated through the joint development of an SQL based knowledge, project and customer relationship management expert system.

The project has contributed to regional development in broad terms through the provision of managed access to university expertise, facilities and services to the business community and as an agent for cultural change within the partner institutions, more specifically through the delivery of university outreach activities and interventions identified in national and regional business support programmes and initiatives.

In EU Structural Funds terms the following impacts have been identified:

Gross new turnover	£14.74M
Gross safeguarded turnover	£5.34M
Gross new jobs	369 (Net = 265)
Gross safeguarded jobs	486 (Net = 355)
SME investment	£4.72M
Net new value added	£3.83M
Net safeguarded value added	£1.39M
Total equivalent value of impacts = £35.6M	

(calculated following structured post-completion assessment interviews with beneficiary companies using standard outcome indicators specified by the NE Structural Funds Programme).

### **Lessons Learned**

Importance of standardisation and harmonisation amongst partner organisations of procedures, values and standards to improve the customer experience. KH is currently preparing a Best Practice Guide for relevant outreach activities to be implemented at partner institutions and beyond.

Lessons learned in marketing in areas of market failure (ie. underperforming regional SMEs) namely that undertaking this type of outreach activity is primarily a "contact sport". Working in areas of market failure is not, and should not be judged as, a commercially viable activity and commercially orientated metrics are not necessarily the optimum indicator of successful activity.

Also the importance of the internal (ie. HEI) market from which most KH work is derived.

Establishment of common and agreed expectations prior to initiation of the project including distribution of funding and deliverables. A Memorandum covering these items and also stipulating monitoring (and if necessary arbitration and remedial actions) was signed by all partner organisations.

KH and its expert system, recognised as an exemplar by the partners, is now in the process of being more widely deployed for outreach services in the partner institutions as part of a regional roll-out programme.

Knowledge transfer partnerships in the North East (current in 2005)

<b>University Partner</b>	<b>Company Partner</b>	<b>Company Size (employees)</b>	<b>Region</b>
University of Durham	Energy Scitech Limited	10 to 49	South East
University of Durham	Oxford Chemicals Limited	250+	North East
University of Durham	Metal Spinners Group Ltd	50 to 249	North East
University of Durham	Spotlight Guides Limited	10 to 49	North East
University of Durham	Dyer Engineering Limited	50 to 249	North East
University of Durham	Langbaugh Primary Care Trust	250+	North East
University of Durham	CAV Aerospace Limited	250+	North East
University of Durham	KC Engineering Ltd	10 to 49	North East
University of Durham	Domnick Hunter Group PLC	250+	North East
University of Newcastle	Explorer Group Limited	250+	North East
University of Newcastle	Karol Marketing Limited	10 to 49	North East
University of Newcastle	CISV International Limited	< 10	North East
University of Newcastle	D1 Oils Plc	10 to 49	North East
University of Newcastle	Newcastle Primary Care Trust	250+	North East
University of Newcastle	Peacocks Medical Group Limited	50 to 249	North East
University of Newcastle	Dunston (Ship Repairs) Ltd	50 to 249	Yorks and Humber
University of Newcastle	R B Pipetech Ltd	10 to 49	North East
University of Newcastle	Washington Display Ltd	50 to 249	North East
University of Newcastle	Expanded Metal Company Ltd	250+	North East
University of Newcastle	Alcazar Ltd	10 to 49	North East
University of Newcastle	Uniq Prepared Foods Ltd	250+	East Midlands
University of Northumbria	MKW Engineering Limited	50 to 249	North East
University of Northumbria	Penny Plain Limited	50 to 249	North East
University of Northumbria	Salamander Pumped Shower Systems Ltd	10 to 49	North East
University of Sunderland	Veterinary Immunogenics Limited	< 10	North West
University of Sunderland	Washington Envelopes Ltd	250+	North East
University of Sunderland	FUDA International Trading Company Ltd	10 to 49	North East
University of Sunderland	Colin Williams Design Ltd	10 to 49	North East
University of Teesside	Direct Line Supplies Limited	10 to 49	North East
University of Teesside	Country Valley Foods Ltd	10 to 49	North East
University of Teesside	Malcolm Engineering Company (Darlington) Ltd	50 to 249	North East
University of Teesside	QNet Group Limited	50 to 249	North East
University of Teesside	Straker Six Limited	10 to 49	North East
University of Teesside	Visualsoft UK Limited	< 10	North East
University of Teesside	Bay Plastics Ltd	10 to 49	North East
University of Teesside	Profile Analysis Ltd	10 to 49	North East

### **NetPark (North East Technology Park), University of Durham**

NetPark is a major “R&D park” development located in County Durham. The aim of NetPark is to establish a centre of excellence where research and innovation can flourish, accommodating world-class commercially oriented research centres, and spin out companies, some of which are incubated in the University but need space for development. NetPark has a critical role to play in the economic regeneration of the North East through the building of a “knowledge driven economy”. The project works by identifying appropriate potential near-market e.g. close to industry research and development activities that can be incubated from the University’s fundamental research base and grown quickly in a more commercial environment on NetPark.

The park was initiated by Durham County Council; Sedgefield Borough Council; and One NorthEast in 2002, with funding from ERDF; Regional Single Programme; and the Sub Regional Single Programme. The first two buildings on NetPark are now complete. The first, the NetPark Research Institute, provides a home for two leading edge research groups from Durham, the Centre for Advanced Instrumentation (CfAI) and the Institute for Agility and Digital Enterprise Technology (IADET) (see separate case study). The CfAI uses adaptive optics techniques in the instrumentation packs it creates for large telescopes worldwide, in both the visual and infrared bands. The second building is the NetPark Incubator which provides office and laboratory space for new companies and technology-driven University spin outs. Three of the University’s spin-outs are now located in the Incubator.

Durham University’s relationship with NetPark comprises the Vice Chancellor and Deputy Vice Chancellor as members of the NetPark Advisory Steering Group, and a representative from the University Research and Economic Development Support Service who attends the NetPark Executive Board.

NetPark aims to develop a critical mass of science and technology activities working alongside leading edge researchers the Strategy for Success, the region’s innovation strategy. NetPark seeks to harness the strengths not only of the University of Durham but the other regional universities in a central location and will be founded on fast-track access to their world-class research and teaching facilities.

As an anchor tenant, the University is helping key local agencies (Durham County Council, County Durham Development Company, Sedgefield Borough Council and One NorthEast) to develop NetPark and the knowledge-based economy. The University’s collaboration with leading edge research centres in the USA and Europe as well as their collaboration with global corporations is viewed as a magnet in getting multinational institutions/companies to locate in the North East Region and in particular on to NetPark.

The results so far have been that the park has:

- created a science and technology park of exceptionally high quality and design which is growing an indigenous business base and attracting international interest and investment
- secured university-based activities in the form of spin-out companies and research centres
- has secured accommodation for two of the Region’s Centres of Excellence
- phase 2 of the NetPark Development is to go ahead in September 2005 with planning permission granted for two new buildings –an extension to the Incubator and a new facility on plastic electronics entitled the Direct Write Technology Centre
- has allowed a critical mass in terms of state of the art equipment to be housed and accessible to the Region’s business community



*Table of spin-off companies from North East universities since 1990 – to be updated*

Name of Company	Est.
AMSYS Ltd	1997
Applied Bayesian Consulting Ltd	1997
Arjuna Solutions Ltd	1998
Arrow Therapeutics	1998
Brewlab Ltd	1998
EPICC	1995
Genotype Ltd	1993
Geopressure Technology Ltd	1997
NE Microelectronics Centre Ltd	1997
NEREC-EMC	
Northgene Ltd.	
Nuwater Consultancy Services Ltd.	1993
OCEPS	1991
Oxford Geotechnica International Ltd	1995
Protensive Ltd	1999
Quest Ltd	1994
Selective Antibodies Ltd	
Springfield Centre for Business Development	1996
Software Migrations Ltd	1994
3F Ltd	1995
Tree Roots Investigation Ltd	1993
Trends Business Research	c1990
Virtual Reality Centre Ltd	1997
Xcellsysz Ltd.	2000

Since its inception in 2000, the North East Centre for Scientific Enterprise has worked with Durham University on 100 commercialisation projects. From these 14 businesses have been “spun-out”, including:

- Reinnervate: The company concentrates on neural stem cell research and development to facilitate cell lines, assays, enabling systems and therapeutic patents, which in turn are licensed and sold to major pharmaceutical and biotechnology companies.
- Creative Gene Technology
- Surface Innovations Limited
- Durham Pipeline Technologies Limited
- Evolving Generation Limited
- Concept Analyst Limited
- Lyrachem: A high technology chemical synthesis company, offering a range of products, services and its own patented technologies, to the pharmaceutical and fine

chemical sectors. Technical proficiency coupled with strong ties to the Chemistry Department at Durham enable LyraChem to operate at the forefront of current chemical technology.

- Durham Scientific Crystals: Manufacturers of high quality single crystal cadmium telluride wafers.
- Geospatial Research Limited: research and application of innovative methods for acquisition, visualisation and analysis of geospatial data. Construction of detailed 3D virtual outcrop models that quantify sub-seismic scale fracture geometries and sedimentary architectures - improved input for fluid-flow modelling in hydrocarbon exploration and production. .

## **Annexes for chapter 5**

### **Timeline of Durham University Queen's Campus, in Stockton-on-Tees**

1987 – TDC recognise need for additional HE provision

1988 – Launch of Teesside Initiative in Higher Education, supported by Universities, Cleveland County Council, Health Authority, TDC and local industry

1990 – Durham and Teesside Universities sign joint agreement to establish Joint University College on Teesside

1991 – TDC offers site on Teesdale development and Government approval granted for TDC plan (valued at over £10m for building, site and services)

1992 – University College, Stockton-on-Tees opens. Welcomes 190 students in BA European Studies, BA Human Sciences and BSc Environmental Science, modular in structure and on a semester basis.

1993 – HM the Queen officially opens UCS, the first purpose-built university campus for 25 years. Students rise to 450, BSc Health and Human Sciences and Diploma in Science added.

1994 – College becomes a teaching and residential college of the University Durham, in academic partnership with the University of Teesside. First Hall of Residence opened by Lord Stockton. Students rise to 600 FT and 60 PT. Wins approval from DfED to run a pilot Specialist Teacher Assistant Certificate Course

1995 – First students graduate in Stockton Parish Church. New BSc begins in Biomedical sciences

1996 – Initial Teacher Training and Childhood Studies courses begin. University of Durham assumes full control of teaching

1997 – Student numbers rise to over 1,000, now a full campus of the University of Durham

1998 – Work begins on new buildings on site, including a new academic building, the Ebsworth, and a second Halls of Residence block. Opened by the Chancellor, Sir Peter Ustinov. College officially renamed University of Durham, Stockton Campus (UDSC). New degrees in Applied Psychology and Business Finance

1999 – Rocket Union opens as student social centre. 70 new medical student places are awarded to Stockton in a joint programme with Newcastle University – to start in 2001. Student admissions reach 1,300 FT. New BA in Sport, Health and Exercise begins

2000 – Sleep Lab officially opened in Ebsworth. Residential accommodation completed for further 70 students bringing room total to over 500

2001 – Campus secures biggest allocation of European funding ever allocated to Durham University with £3.5m ERDF grant. Wolfson Foundation backs this with £4m and construction of the £11m Wolfson Research Institute begins. Theme of research is Health and Environment and includes 23 labs, 60 offices 2 prep rooms and 4,500 sq. mtrs of space. Two new colleges, John Snow and George Stephenson, announced to bring campus into Durham collegiate system. £950k investment by Sport England in a new water sports facility.

2002 – UDSC is awarded the title of Queen's Campus in royal jubilee year. Wolfson RI officially opened by Baroness Greenfield. Congregation ceremonies move to Durham Cathedral

2003 – First intake of medical students complete Phase 1 of their training at Queen's

2004 – work begins on Phase I of new sports facilities, including 2 x 5-a-side pitches and changing facilities. Phase II is envisaged to include an indoor sports hall

Future plans – 2005 is a critical time for the future of the campus. Plans are well advanced to extend the Wolfson Research Institute by adding a 4th wing in a £3.5m development. Discussions are also well advanced with Tees Valley Regeneration about the future expansion of the campus onto the North Shore of the River Tees as part of a major capital development there. This could possibly include new college accommodation, teaching space and an additional new Wolfson building

The campus has had a significant impact upon regional development and will continue to do so as it grows. Its key impacts lie in economic, social, cultural and health areas.

**Economic** – The presence of the campus contributes a total of 416 FTE (actual & induced) jobs to the local economy with students directly contributing over £3m p.a. to the local economy. The campus is also a successful conference venue averaging 150-200 events per annum, with the inherent economic benefits to the local economy. Many examples of ongoing economic impact exist. For example, in a bid to develop the campus's regeneration impact a project entitled Knowledge into Business (KIB) has been based at the campus since 2003. It includes officers with specific Tees Valley agendas covering Regeneration, Business Support activities<sup>3</sup>, Environmental and Sports Development. In 2004/5 this project alone created 35 new jobs, safeguarded a further 121 as well as delivering a range of other direct economic benefits for Tees Valley.

**Social** – The campus now provides a focus for lecture series, community work and other social activities. For example, in any academic year the campus will welcome children from many local schools for aspiration activities. In 2005-6, 40 STARS (Schools Targeted Aspirations Raising Scheme) events will take place along with summer schools and local events. As an example of direct community impact, in July/August 2005 Durham University researchers will be working with Stockton Borough Council to carry out work relating to local crime and repeat domestic burglaries – representing topical issues affecting local people today.

**Cultural** – With two colleges now based at Queen's campus, the cultural profile of the area has been enhanced. For example John Snow College now support the highly successful Café Scientifique in the centre of Stockton. This brings high quality scientific speakers to discuss topical and pertinent issues in a forum open to all.

**Health** – The research activity of the Wolfson Research Institute has the most significant implications for local, sub-regional, regional and national health agendas – see separate paper. In addition, the Sports development activities run at Queen's now include regular health weeks, activity sessions on campus in association with Middlesbrough FC, Teesside University and others

### **University of Sunderland - Sir Tom Cowie Campus at St Peter's**

Sunderland (and its University) has a history of continual renewal through innovation. This can be traced starting with Sunderland's geography, through its geology then manufacturing to weightlessness: a thread of continuous physical and knowledge regeneration. The University itself can trace its origins back through the Sunderland Technical College and the School of Art and Design, to the college of arts and science founded in the middle of the 19th

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<sup>3</sup> Via Single Programme and HEIF II funding, KIB provides a Regeneration Officer, Agility Engineer (manufacturing and business processes consultancy and support), NECESI (North East Centre for Environmental Science and Industry) Associate and a Sports Development Officer – all specific to Tees Valley

century: also to the local authority's teacher training college. Throughout its history, the University and its fore-runners have had close connection through the curriculum, research and other activities with industry, business and other organisations.

Sunderland's Geography – the river and the associated human activity, is the key geographical feature: Sunderland grew because it was the natural crossing point on the estuary of the River Wear. Over 1300 years ago, the Venerable Bede (the first English scholar) was born on the south side of the river. At 14 years of age he crossed to join the St Peter's monastery on the north bank (adjacent to where the University campus now stands). The monastery (like our campus) was brand new and part of a 'twin campus' – the other site being St Paul's monastery in Jarrow.

Sunderland's Geology – because it lies on the Durham coalfield, Sunderland grew as a mining centre as well as a port. Also, because sand was brought in as ballast, a glass industry grew – so continuing the association with glass: St Peter's monastery was the first use of architectural glass in England. The tradition continues through to today since the University is internationally renowned for glass art. The University has substantial facilities in the National Glass Centre (which is adjacent to the campus) that are unique in Western Europe and are increasingly a resource for practitioners as well as for University research and teaching.

Sunderland's Manufacturing Prowess – arising from its geography and the activity associated with its geology and port activity, it was natural that shipbuilding would take place. This grew apace and around 100 years or so ago, Sunderland was building the most tonnage of any shipbuilding centre in the world. Shipbuilding was still going strong in the 1950's and 1960's and at that time Sunderland Technical College (a forerunner of the University) attracted many students from overseas (Greece and Norway in particular), as well as from the UK, in view of its expertise in naval architecture. The site of the St Peter's Campus was first an engine works, then a ship repair yard then a shipyard. The slipway ran the length of the site. Along with all of the Sunderland shipyards, it closed in the 1980's. This was a dark period for Sunderland, but with typical resilience, the Nissan plant - built at around this time - has become the most efficient car manufacturing plant in Europe. Today, more people are employed in Sunderland in Nissan and the automotive supply chain than had been employed in mining and shipbuilding combined.

Weightlessness – location having been so important in the past, it is of much less relevance in the knowledge economy of the 21st Century. Sunderland is established and recognised as one of the most (IT) 'intelligent cities' in Europe. The Leighton group is an example of the growth of the new companies for which geography is irrelevant: it is just as easy to work with clients in Newcastle in Australia as in that other Newcastle 15 miles up the road. The University has strength in computing and the David Goldman Informatics Centre not only has state of the art facilities but was selected by the Centre for Architecture and Building Excellence (CABE) as one of five examples of university buildings with a 'wow factor'. The theme of that CABE study was 'design with distinction, the value of good building design in higher education'.

The modern media industry is one that has necessarily been at the forefront of weightlessness – and the University is a centre of excellence for media teaching and research. The physical manifestation of this academic excellence is the Media Centre, opened in 2003 by Estelle Morris, then Secretary of State for the Arts - a former Secretary of State for Education and now a Pro Vice-Chancellor of the University of Sunderland. The Media Centre has state of the art, industry standard, facilities and the University is one of a very small number of European universities to be a partner of SONY – which not only has a longstanding relationship with the University but made some investment in the Centre and in part-funding of a Professorial post. There is a strong working relationship with the journalism, public relations, TV and radio professionals in the region. They provide us with hundreds of student placements in their newsrooms and offices every year and most of their senior executives have come in to give lectures or take part in student workshops. The journalism and PR programmes have professional accreditation. The Media Centre is the location of the

TyneTees TV's Sunderland newsroom and the BBC's Chief News Correspondent Katie Adie (who is from Sunderland) is an Honorary Professor of the University. The journalism students even write a page each week in the city's evening paper. The University has a record of support for the digital media companies in the region, including through its Digital Media Network which formed the springboard for development of Codeworks – which occupies part of the Media Centre.

The University (particularly since its designation as a University) has been a key contributor (possibly the key contributor) to the change in Sunderland over the recent past from a town in decline into an energetic University city. For example, in terms of regeneration, the Sir Tom Cowie Campus at St Peter's was designed as a civic statement – a signpost to Sunderland's future as a centre for enterprise in the weightless knowledge economy. Built on the site of a shipyard, next to the site of the monastery where Bede lived and worked, the campus is built for the needs of the 21st century – the knowledge economy.

The campus commenced with the Sunderland Business School (now the Reg Vardy Centre) and Prospect (amenities) buildings, opened in 1994, followed by the Informatics Centre and library extension in 1996 (with creation of the piazza-style University Square) and the Media Centre in 2004. There are some student residences on the south bank, facing the campus across the river. The University has invested £60 million in development of the Campus and there has been substantial philanthropic contribution from home-grown entrepreneurs such as Sir Tom Cowie (who founded the Sunderland-based company Cowies, now renamed Arriva), to the Media Centre in particular.

Only the best is good enough for Sunderland, and the campus has been planned and designed accordingly. As a consequence, not only has part of it been selected by CABE (as indicated above) as an example of 'wow factor' but other elements have been awarded the Royal Fine Art Commission and Sunday Times University Building of the Year award (1995), RIBA Architecture Northern Region Award (1995) and the Civic Trust award (1998) for outstanding contribution to the environment.

Considering the entrepreneurial past, it is not surprising that the University is committed to encouraging enterprise. The University has been chosen by the National Council for Graduate Enterprise as the enterprise champion for the north east's universities. This builds on a long record of supporting entrepreneurship through the hatcheries in academic buildings (including the Reg Vardy Building, the Media Centre and the National Glass Centre) and the more recent establishment of the incubator facility of St Peter's Gate (the venue for the meeting with the OECD Panel), opened in 2004. This incubator has been a real success, achieving its occupancy targets ahead of schedule.

In summary, Sunderland and the University (and its forerunners) have a history of enterprise, innovation and adaptability to changing circumstances. In the weightless economy of today, where knowledge is the key commodity, the University is recognised as an essential player in Sunderland's future. In return, the University's philosophy is to listen to the needs of partners in order to best deploy its expertise to collectively solve problems – in a two-way process. The Sir Tom Cowie Campus at St Peter's is a physical embodiment of this commitment to knowledge regeneration.

### **University of Teesside Community Regeneration Programme**

This programme has stemmed directly from the UoT mission, and a key strand of activity is the involvement of University students in many of the initiatives. The objectives are:

To engage individuals and community groups with the University

To promote wider participation in HE

To develop the University, its staff and students, as a central part of the local community

Partners have included local authorities, GO-NE, community groups and organisations, voluntary sector, LEAs, DfES, RDA, and transnational partners and since the mid to late 1990s the programme has drawn on funding from SRB, Single Programme, NRF, ERDF, ESF, Rural Development Programme, BT, and HEFCE.

Key areas of activity have comprised:

Schools Liaison – raising aspirations and attainment through projects such as Meteor, a pioneering programme targeted on primary/early secondary school children in disadvantaged communities. Features include: student mentors; summer schools on campus; science/maths/English masterclasses; extensive use of ICTs. Meteor is managed by the Schools Liaison Unit, with support from across the university and from a wide range of external partners.

Community Informatics Research Applications Unit (CIRA), established with ERDF support in the late 1990s to develop and test out approaches to community development using ICTs for learning, employability, creative skills development and social development. CIRA has worked with a wide range of community groups and organisations, as well as schools (working with excluded youngsters, for example). One example is the use of ICTs to promote and support increased independence amongst older people. Community media activity, from community “blogs” to multicultural events to informal learning programmes for schoolchildren and adults, forms a key element of this initiative and is instrumental in making the University more widely accessible to its local community.

Creative & Cultural Industries Team, based in a central department of the University with a remit to work with local communities on the development and delivery of new programmes of creative activity. Funded by SRB, this project played a large role in increasing the visibility of the University to a wide range of groups, particularly young people, through art, animation, writing, film & media and music programmes; along with the development and management of the Northern Region Film & Media Archive, now based at the University and used as a key community resource. It now forms a central part of the DigitalCity project.

Social Futures Institute (SoFI) brings together over 50 specialist researchers concerned with the North East’s social and cultural well-being and economic prosperity. SoFI is committed to finding practical ways of getting people involved in neighbourhoods and communities so they can make a difference and develop a positive environment for change. Areas of expertise include: asylum seekers and refugees, children and young people, crime and disorder, domestic violence, drugs, community cohesion, public health, homes and homelessness, neighbourhood and urban renewal, social exclusion, sport and leisure. The Institute has proven ability in evaluating policy initiatives and services - including housing and homelessness, public health, education, social cohesion and neighbourhood management amongst others. It acts as the education provider for Regen-School and the Northern Academy for Regeneration, and offers University Certificates in Professional Development over a range of applied issues including Mentoring and Community Development. The Institute co-hosts an annual seminar series with Durham University on regeneration issues.

NISAA aims to enhance Black and Asian women’s opportunities for health and well being. The project combines community development work and academic research. Two projects completed so far are: Creating Employment and Health Opportunities for Black and Minority Ethnic Communities in the North East, and Enhancing Black and Asian Women’s Opportunities for Health and Wellbeing in Central Middlesbrough. Following the success of the first Nisaa project, funding was acquired to develop Nisaa 2, which began in January 2004. The project’s geographical remit encompasses both Middlesbrough and Redcar and Cleveland and target groups include BME men and women, and asylum seekers and refugees. The overall aims are to proactively address gaps in health and social care services and support community members towards employment through the provision of culturally sensitive training and skills development. Two research projects are also under development. The first explores BME women’s life histories in relation to space, place, identity and belonging. The

second focuses upon young people's use of ICTs and explores social connectivity, identity and belonging.

These projects had a wide range of regional impacts including:

Raising the awareness and aspirations of underprivileged children

Improving confidence and skills levels amongst community members of all ages and backgrounds

Giving community groups and organisations a voice

Addressing key social policy issues and influencing policy implementation (NRF for example)

Enhancing employability

Engaging students (through volunteering, mentoring, etc) in community activity

Promotion & support of social enterprise activity

Raising the profile of community development with the HEFCE

Rapprochement of HE and other agencies involved in regional development

### **Wolfson Research Institute**

Also on Teesside, the Wolfson Research Institute is based in a purpose-built building on Durham University's Queen's Campus, at Stockton-on-Tees and began operation in November 2001. The building provides accommodation for 90 staff and 30 research students. The work of the Institute focuses on research on medicine, health and the wellbeing of people and places with particular emphasis upon analysing these issues in the north east of England. As well as helping meet the University's strategic goal of producing top quality cutting edge research, the Wolfson Research Institute strengthens links with the surrounding region and has a key role in meeting its strategic goal of enhanced regional engagement, via contributing to policy formation and implementation.

The Institute has been developed through a partnership involving Durham University, Wolfson Foundation, European Regional Development Fund, Stockton Borough Council, English Partnerships, NHS and others.

Wolfson Foundation - £4m
ERDF - £3.5m
Durham University - £1.5m
One North East - £500k
Stockton Borough Council - £500k
English Partnerships - £1m

Research is organised within a Frontiers of Knowledge framework, which seeks to push back frontiers and cross institutional boundaries in three registers:

- research frontiers within disciplines;
- research frontiers between disciplines;
- translate the results of research across the boundary between the University and its partners and stakeholders, especially in the north east of England.

The Institute will also explore scientific ('expert') knowledges, lay knowledges, and the relationships between them in the context of science and public policy and further develop links beyond the University so that research informs wider debates and practices and, more particularly, to seek to use the results of leading edge research to address problems of development and regeneration in the north east of England.

Future work will concentrate upon reinforcing existing disciplinary research strengths in these areas and developing cutting edge research that cuts across disciplinary and institutional boundaries. The Institute will further develop research links within and beyond the University and explore interdisciplinary approaches that emphasise the connections between research in



the natural and social sciences, in recognition that many research agendas and key questions now span disciplinary boundaries. The current research units within WRI are:

- Cognitive Neuroscience Research Unit
- Child Development Research
- Clinical Management Development
- History of Medicine and Disease
- Centre for Infectious Disease
- Integrated Health Care Research
- North East Public Health Observatory
- Health Development Agency
- International Centre for Regional Regeneration Development Studies (ICRRDS) (soon to be renamed as the Centre for the Study of Cities and Regions)

Following the establishment of the Health Strategy Board in 2005, the Wolfson Research Institute became its Research Division. As a result, there was a significant increase in the scope of the Institute's activities as further major research groups on the Durham campus came within its remit. These groups were mainly in the Department of Anthropology and the School of Biological and Biomedical Sciences. This means that there are now around 150 research and research support staff and 100 post graduates working within the framework of the Institute.

The success of the WRI has led to existing capacity having been met already. Consequently, plans are well advanced for the further development of the WRI. A £3.5m bid is shortly to be submitted to the Tees Valley Partnership for Single Programme funding to facilitate the extension of the WRI by adding a 4th wing. In the longer term there is also potential for expansion onto the north bank of the river Tees as part of the new North Shore development. Significant multi-million pound research funding has already been secured by WRI from the NHS for the development of the health agenda.

### **Cultural Quarter case study**

The stimulus for the cultural quarter project in Newcastle emerged from discussions for the City of Culture bid, a rethinking of previous policies towards museums and performance in the University of Newcastle, and a rethinking of the physical design of the campus with a new masterplan developed by Terry Farrell.

For many years the University of Newcastle upon Tyne has fostered a range of cultural activities, located on the campus and representing a key interface with the City and the wider region. But these separate activities have never realised their full individual potential, let alone the wider synergies possible between them.

A bold new vision has now been developed by a wide-ranging partnership of local bodies, led by the University, to establish a Cultural Quarter. This will transform the space where City and University meet into an exciting and vibrant area of cultural and social activity: a major contribution to the region's cultural strategy. It will also exploit the latest new technologies to develop a 'virtual Cultural Quarter', thus creating a range of accessible resources of national and international significance.



The partnership is determined to create a clearly identified Cultural Quarter in Newcastle. This will build significantly (but not exclusively) upon cultural assets currently located on the University's campus, at a key point in its interface with the City. It will transform the immediate area and it will act as a further element in the City's cultural development.

The initial catalyst for the creation of the Newcastle Cultural Quarter was a major initiative by the senior management of the University to assign a much higher priority than before to its cultural and social interface with the people of the city and the region.

Under the leadership of a new Vice-Chancellor appointed in 2000 a major programme of change within the University was launched with the aim of raising its standing - internationally, nationally and regionally. The University's mission has been more sharply defined: 'to be a world-class, research-led educational institution and to play a leading role in the, economic, social and cultural development of the North East of England'.

A key objective of the restructuring is to open out the University to the wider world. This led to a re-evaluation of how the University currently views and manages its estate and cultural assets, including the museums, gallery and theatres. Three specific initiatives were launched; as follows:

The first initiative was the preparation of an Estates Master Plan by the renowned architect/planner and graduate of the University, Sir Terry Farrell.

Second was the appointment of Dr Eric Cross as Dean of Cultural Affairs, to take the lead in developing a cultural strategy for the University, particularly strengthening the academic involvement with the museums, gallery and theatres. Dr Cross now works closely with the museums and gallery curators, the Chief Executive of Northern Stage and the academic community in developing and implementing this strategy.

The third initiative was the provision of a strong voice for the cultural agenda at the central University management level, with Dr Cross reporting to the Deputy Vice-Chancellor Professor John Goddard, who is responsible for central resourcing of museums and galleries. The Director of Estates also joined a newly established Executive Board chaired by the Vice-Chancellor, alongside the provosts of the new faculties, thereby ensuring that the estates issues relating to the University's cultural assets are considered alongside its academic business.

The cultural assets that will comprise the heart of the Newcastle Cultural Quarter consist of three museums, an art gallery and a theatre complex. They are currently managed separately and sit within a poorly developed part of the University's city-centre campus. They are unrelated to each other in terms of marketing and operation and do not, therefore, take advantage of the opportunities to explore relationships between their activities and their assets (buildings and collections).

Although these assets are sited very close to Newcastle's main shopping street (with excellent public transport links) and to Newcastle's other city-centre university (Northumbria University), they are not seen by the majority of people of Newcastle and the wider region as natural places to visit: they tend to be marginal to people's thinking and daily patterns of activity. This is not to say that they are unvisited: school parties are a key element of the visitors to the three museums, the art gallery and the theatres; each has a core of regular visitors, with strong loyalties. The problem is that these visitor numbers reflect, in marketing terms, a low penetration of the available local, regional and national marketplaces. They certainly represent an under-achievement in terms of the importance of the collections housed and the activities undertaken.

In 2009, the visitor will find that the three museums will have been combined, and in the process have been completely reinvigorated:

The Hancock will have been restored to its former glory, in an innovative and exciting way that opens up collection to the visitor and not only utilises state-of-art exhibition methods but also provides opportunities learning in a vibrant education suite with an attached garden for outdoor activities. The Hancock will house



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Roman Wall exhibits, together with pre- and post-Roman artefacts, not as a separate display but on a basis that sympathetically integrates archaeology with natural history. Visitors will also be able to explore the ancient civilizations of Egypt and Greece and more recent world cultures which incorporate ethnographic collections.

The rest of the Great North Museum will include a purpose-built extension which houses a superb changing exhibitions gallery and the combined library of the Society of Antiquaries and Natural History Society. Off-site but nearby will be an accessible Resource Centre.

Across the road, a suite of refurbished buildings will incorporate shops, a restaurant and a location for creative enterprise and activity, including for example the Northern Writers Centre. The Hatton Gallery nearby will be able to host additional special exhibitions because it will gain the custom-designed facilities that such attractions require.

In the evenings there will be opportunities to experience up to two productions at the theatre, which might incorporate digital media inputs from the University's own Culture Lab venture next to the theatre, where academic and student members of the arts and science facilities explore the cutting-edge potential of digital technology to express artistic aspiration and creativity. The productions may have been developed at the Northern Writers Centre, and could be supplemented by lectures and talks as part of the concert and lecture series.

A final element of the cultural quarter is the provision of bands and DJ acts performing in the Students' Union programme; the strong links between the multi-ethnic student body and the City's ethnic and cultural groupings finding expression in a number of events throughout the year.



Above all, it is intended that in subtle, unobtrusive and sympathetic ways, the visitor should be aware of a feeling of common purpose in the Newcastle Cultural Quarter that, while each of its elements is pursuing its own artistic or heritage agenda in a vigorous and creative manner, there is a level of co-operation and integration ensuring that, for the visitor, the total is truly greater than the sum of the parts.

Behind the scenes this will be achieved by a structure of joint management of the Newcastle Cultural Quarter, dealing with policy and operational issues, that has already been in existence since 2003. By 2009 the level of trust and experience of working together that the partners to the Newcastle Cultural Quarter will have accumulated will mean that, as a matter of course, the integrated planning of programmes of future events, marketing activity, operational and logistical factors, shared use of facilities and prioritisation of funding bids and their joint submission will be routinely the direct outcomes of managing the Newcastle Cultural Quarter together. This will not have happened by wishing for it but by the operation of a Newcastle Cultural Quarter Advisory Group and an Operations Group. These Groups will also have responsibility for ensuring that the Newcastle Cultural Quarter and its constituent elements work effectively within their City and regional contexts.

The complete vision for the Newcastle Cultural Quarter will not be achieved by 2009: it will never be achieved, because those responsible for it will always be striving to surpass its achievements and to move on to new aims. The major change that the Newcastle Cultural Quarter will bring about is that, at any one time, there will be on offer a range of cultural, arts and heritage offerings that engage the visitor and bring to life the past, the present and the future in ways that transcend traditional boundaries between times, between disciplines and, particularly, between arts and sciences. As a result, the remarkable collections so inadequately housed and displayed in 2003 will be national assets in 2009 and for many years beyond; above all, they will have become available to, and accessible by, vastly greater numbers of people, whatever their background.

### **NPAC/Romag Case Study**

The Northumbria Photovoltaics Applications Centre (NPAC) at Northumbria University has been undertaking research on all aspects of photovoltaics, the conversion of sunlight to electricity, for over 20 years. This long-standing activity has been characterised by close interaction with companies and business support agencies in the region and supported the local development of this segment of the renewable energy industry, which has enormous commercial and environmental potential.

In the late 1990s, a local company called Romag, with a well-established reputation for the provision of specialist glass, approached NPAC for advice on entering the building integrated photovoltaics (BIPV) sector. Even at that time, NPAC had a strong reputation for BIPV research, having installed the UK's first photovoltaic façade on the University campus. NPAC's contacts in the field allowed Romag to open discussions with relevant UK industry, including BP Solar, one of the world's largest PV cell manufacturers. Although Romag's investment portfolio did not allow them to pursue BIPV at that time, these initial links proved fruitful when the company decided to revisit the technology a few years later.

Staff from NPAC worked with the Regional Development Agency, ONE North East, as they considered ways in which the entry of Romag into the photovoltaics sector could be supported and the University has kept a close relationship with the company ever since. This has included technical discussions and participation in promotional activities. The company also took on one of the students from the European Master's course in renewable energy for his project period. Having trained in photovoltaics at Northumbria, Jose Maria assisted the company in the setting up of their manufacturing line for architectural PV modules in the spring and summer of 2004 and remained with the company as a technical development manager. Throughout this time, he recognised the importance of BIPV modules as a key component in the renewable energy product supply chain and

Photovoltaics forms an important strand of the region's New and Renewable Energy Centre (NaREC) and NPAC played an important role in helping to establish a capital PV facility at NaREC's headquarters. This involved the acquisition of the only existing national facility following the closure of BP Solar's UK research unit in the South of England. The Department of Trade and Industry has encouraged the region to develop this technology and there is now a strong regional capability in Building Integrated Photovoltaic Systems. Northumbria University provides both fundamental research into systems and applications and training of personnel, NaREC focuses on product development while Romag is developing a successful business in supplying PV modules to customers all over the world. This infrastructure should provide a great opportunity for other local firms to enter the supply chain for this new and emerging global market.

### **CLEMANCE case study**

The Clean Environment management Centre (CLEMANCE) has been developed on the back of teaching and R&D capabilities in environmental engineering and science, and has drawn upon the networks of expertise and industrial groups established through EPICC to engage business. CLEMANCE now offers R&D/teaching & learning/ and knowledge transfer in specialist areas such as bioremediation, and is bringing in major contracts from, eg, DEFRA, as well as working with Centres of Excellence (CPI, NaREC) and initiatives such as RENEW Tees Valley to help deliver key environmental programmes. Sound project management is again a key feature.

Industry and the public sector is under increasing legislative and public pressure to improve its environmental performance. The Clean Environment Management Centre – CLEMANCE - challenges the idea that environmental protection is a financial burden on industry by providing clean technology solutions to the environmental problems in the North East of England. The Clean Technology approach avoids pollution before it occurs. Many companies

have discovered that its adoption can provide significant competitive advantage through reduced costs, product differentiation and improved public relations. CLEMANCE aims to support the development and implementation of Clean Technology to improve the competitiveness of the region's industry and benefit its people and environment.

Research projects have included Mapping Industrial Symbiosis in North East England. The centre has a dedicated microbiological research laboratory equipped for pilot scale bioremediation trials, isolation and cultivation of microbes, and a state-of-the-art bioreactor.

CLEMANCE offers the following programmes and resources.

- Bioremediation Programme – provides specialist consultancy and support to businesses in remediating contaminated land using bioremediation and in situ methods.
- Community Programme - supports ventures relating to sustainable community activities like education.
- Industrial Symbiosis Programme - companies co-operate to utilise each other's by-products including materials, energy and process water, to maximise the value extracted from those resources while minimising flows to and from the environment.
- Sustainable Technology - provides heavily subsidised clean technology support to SMEs in the North East with the aim of making those SMEs more competitive.
- Sustainable Product Programme - supports the improvement of the environmental performance of products across their entire lifecycle. A simple sustainable product development methodology is available online.
- Environmental Technology Transfer Club - brings together the public and private sectors to discuss environmental issues.

## **Annexes for chapter 6**

### **Unis 4ne**

#### **Mission, role and priorities**

The mission of the association is to “support the development and promotion of the partner universities’ collaborative activities in the North East and beyond”. The aims are to “work with the region’s universities to help develop productive cross-university collaborative activities with government, business, public, educational and voluntary sector organisations” and to “identify and support collaborative partnerships with regional stakeholders to maximise the universities’ contribution to the economic, social and cultural life of the region”.

There are four main objectives:

- support the development of the breadth and quality of the regional universities’ academic provision and related activities
- support research in the North East region with the aim of enhancing the quantity, quality and reputation of research activity from the region’s universities
- support knowledge transfer and enterprise activities with the aim of maximising the universities’ contribution to wealth creation and in particular to North East business development and the regional economy
- act as a major point of contact and effective voice for the region’s universities

#### **Membership**

Members

- Durham University
- University of Newcastle
- Northumbria University
- University of Sunderland
- University of Teesside

Associate member

- Open University in the North

#### **Services for members**

- Support for senior executive and policy development committees – Board, Executive, Research, Knowledge Transfer and Academic Development
- Support for thematic/standing committees – European, Sports, Business and Enterprise, Culture, AimHigher Regional Forum, Health Group
- Support for operational/project management committees – Knowledge House, KTP NE Network, CuPiD (CPD for KT Professionals), Cultural Skills Development Initiative and SAGE Music Centre project.
- Strategy/policy development
- Project management
- Communications – internal/external
- Knowledge/information management

- Liaison – internal/external
- Promotional activity and PR
- Representation
- Co-ordination

#### **Services for partners and stakeholders**

- Project management and delivery services eg. Knowledge House – consultancy and research; AimHigher – access and participation
- Partnership development between universities and with external stakeholders
- Advocacy and ambassadorial/representational role
- Co-ordination of collaborative activity
- Distribution/dissemination of information

#### **Income (2004 -5)**

Secretariat

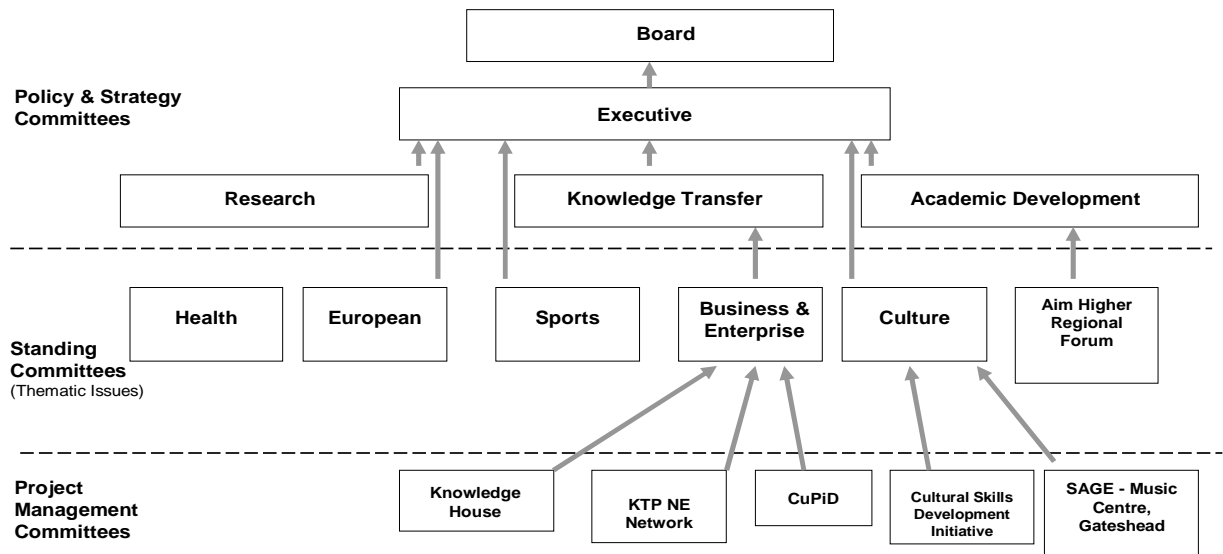
Subscriptions	£36,910 (incl. balancing payments)
HEFCE R&CF	£25,000
Internal funds	£63,102
Project recharges	£64,545
Sub-total	£189,557
Project/programme delivery <sup>4</sup>	
Knowledge House (HEFCE, ERDF)	£1.77M
AimHigher (incl. Summer Schools etc)	£7.87M
Sub total	£9.64M
Total	£9.82M

#### **Structure and operations**

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<sup>4</sup> Please note that most of this project income is distributed to the member institutions

## Universities for the North East Structure



### Description of Committee roles and activities:

Board	Vice Chancellors of the five campus universities. Chair - Prof Chistopher Edwards (UN). Overall strategy and policy.
Executive	Pro- / Deputy Vice Chancellors. Make recommendations to the Board in relation to the co-ordination of the work of member universities. Monitor the day to day finance, administration and activities of Universities for the North East. Chair – Prof Philip Jones (UD)
Academic Development	Assist and advise the Board and Executive in a strategic capacity on issues relating to education and employment policies. Chair – John Shipley (OUiN)
Research	Pro- / Deputy Vice Chancellors responsible for research. Chair - Prof John Ditch (UNN)
Knowledge Transfer	(Mostly) Pro- / Deputy Vice Chancellors responsible for knowledge transfer. Chair – Dr Douglas Robertson (UN)
European	To advise the Executive on issues relating to European (and other) funding initiatives. Chair – Bob Brown (US)
Business & Enterprise	To actively explore opportunities for inter-university regional economic development projects and advise the Executive accordingly. Chair – Katharine Ridley (UD)



Sports	To explore and develop where appropriate opportunities for inter-university collaboration and co-operation in sports related issues. Chair – Peter Warburton (UD)
Culture	To actively explore opportunities for regional inter-university collaboration in relation to academic cultural activities and initiatives. Chair – Chris Bailey (UNN).
Health	Health and health related training issues, Health CETL, NHSU. Chair - Helen Pickering (unis4ne)
AimHigher Regional Forum	Joint Chairs – John Widdowson (New College Durham); Lesley Braiden (UN)

### **Staffing**

Secretariat (core staffing) – 3.0 FTE

Projects and programmes – 17.5 FTE

### **Further information**

[enquiries@unis4ne.ac.uk](mailto:enquiries@unis4ne.ac.uk)

[www.unis4ne.ac.uk](http://www.unis4ne.ac.uk)

## **Institutional capacity building for regional involvement – Newcastle University**

Although there has been a relatively longstanding policy of supporting regional engagement in Newcastle – a Regional Development Office was established nearly ten years ago for example – the academic leadership and organisational infrastructure has been considerably strengthened since a general university restructuring process three years ago. This restructuring was prompted by the arrival of a new Vice-chancellor who recognised the need both to unlock the research potential of the University and encourage growth, as well as connecting this potential into a process of mutually beneficial partnership within the region.

In terms of the central management team of the University, the position of deputy VC was created which incorporated a responsibility for regional engagement and strategic development. More recently a new PVC position has been created to manage the Science City project, alongside PVCs for teaching and learning, research and external affairs, planning and resources, and the three faculties. This comprises the executive board of the University, supported by the Registrar and directors of services. These central services were also reorganised into larger units, two of which are most concerned with regional affairs – Research and Business Development Directorate and External Relations Division.

Engagement with business and the community has also been reinforced at faculty and even school level by the introduction of a dean for business development in each of the three faculties and directors of business development or third strand activities in many of the schools.

At the same time the university revised its mission to reinforce its commitment to regional development.

## **Institutional capacity building for regional involvement –University of Durham**

Durham University introduced new developments in academic leadership and central management with the appointment of: a European Regional Programmes manager in 1996; a Deputy Vice Chancellor with a special remit for regional Affairs in 2004; and the establishing of a Regional Regeneration Team as part of the Research and Economic Development Support Service (REDSS) in 2000.

The University's Corporate Strategy has Regional Engagement as one of its key aims. The University Regional Outreach Strategy 2004 – 2007 has also been developed and is being implemented through academic departments which are asked to respond to the Regional Strategy through their annual Departmental Strategic plans.

The Deputy Vice Chancellor has overall responsibility for the University's regional engagement and outreach work and is supported in this regard by the Regional Regeneration Team of the University's Research and Economic Development Support Service (REDSS). The Regional Regeneration Team has been created with an explicitly regional/local remit using the University's own resources and HEFCE "Third Leg" funding. Faculty Deans led by the DVC and supported by REDSS are responsible for the successful implementation of the Regional Outreach Strategy. The DVC reports regularly to the University Executive Committee on progress with the implementation of the Strategy.

Faculty Deans, supported by REDSS monitor and evaluate regional outreach performance against the strategic plans of academic departments. This has been facilitated by the restructuring of REDSS along Faculty lines to provide dedicated officer support to each Faculty.

Regional outreach activity is co-ordinated through a newly created Regional Outreach Steering Group chaired by the DVC and reporting to the University Executive Committee The Steering Group is supported by REDSS and comprises:

- Faculty Deans
- The Dean of Durham Business School
- The Director of the Tech Transfer Office
- The Director of REDSS
- The Head of the Regional Regeneration Team
- The Head of Marketing
- The Treasurer

Regional communication channels are very open. Regional stakeholders contact academic staff and central support staff directly although regional decision taking is necessarily centralised as contractual commitments are involved. Senior Officers of the University represent the University on key regional organisations e.g. sub regional partnerships, the Science and Industry Council, the Boards of some centres of Excellence. Contact through REDSS is encouraged and the University publishes a number of documents including community newsletters as well as its website aimed at raising the profile of the University regionally/locally. A regional benchmarking assessment has been undertaken and will be repeated. The University has also held a regional showcasing event at Gateshead aimed at stakeholders in the private and public sectors.

The University keeps abreast of ICT developments and applies them where appropriate in its management structures and practices.

## **Human and Financial Resources Management**

Durham University's HR Strategy is in line with and supports the University Strategy which has regional objectives. The University resource allocation methodology does not make a direct link between regional engagement and additional resource. However, we operate a contribution model where increased income, including income from regional engagement, will strengthen a department's case for additional resources.

Staff with regional responsibilities in REDSS receive training through the CUPID programme. They also attend specialist workshops nationally and regionally on specific regional issues/themes. REDSS staff also organise training workshops for academic and academic related staff involved in regional projects. The University reward strategy has no separate element regarding reward for regional engagement.

Regional (Single Programme, EU structural Funds and other regional funds) and national (HEROBC, HEIF, KTP) funding streams are all managed through REDSS up to and including the award of funding contracts. Post award, the financial responsibility for contracts is decentralised to individual academics, academic Departments and Faculties with Treasurer's department providing central support services on claiming grant and monitoring expenditure.

The regional role of the University is paid for from the University's own resources, "Third Leg" funding from HEFCE, regional grant sources (primarily Single Programme and EU Structural Funds), KTPs and a small amount of commercial income. REDSS generates the Third Leg funds and supports academic staff in generating grants from regional sources and KTPs. Funds from regional sources are currently declining due to changes in Regional Regeneration policy and the ending of European Structural Funds for the North East Region

The main obstacle to adopting greater regional engagement is trying to fit everything in. In this respect, regional engagement competes for academic time with research, teaching and learning and administrative tasks. Nevertheless, it is recognised that regional engagement can help to achieve research excellence objectives.

The University has done much to raise the profile of regional engagement within the University through the work of REDSS, Senior Officers such as the Vice Chancellor and the Deputy Vice Chancellor, the Regional Outreach Steering Group, the Regional Outreach Strategy and the Corporate Strategy. The University is also raising the profile of its regional engagement work outside the University through regional events, community newsletters, PR and marketing. Significant progress has been made both internally and externally in raising the profile of the University's regional agenda.

Regional engagement is very much part of the University of Durham's mission and in some areas has a significant influence on mainstream teaching and research. Examples include the Durham Foundation Degree Programme, some activities in the Durham Business School, research in parts of the arts, social sciences/health and science faculties and the introduction of an enterprise module into the biological sciences curriculum.

## **Institutional capacity building for regional involvement – Northumbria University**

Academic leadership and management : A designated member of the Senior Management Team has the lead on Regional Strategy and all other members of the SMT have regional responsibilities in relation to their specialist remits e.g. Research; Learning and Teaching.

Institutions strategic plan : the University Corporate Plan contains an explicit Regional Strategy with key objectives and related KPIs.

Channels of Communication : main channels are through U4NE for collective initiatives and directly to senior ONE and GONE officers for issues relating to just Northumbria. The SMT,

advised by Regional Strategy Committee, is the main decision-making body for regional issues.

Coordinating within University : the Regional and European Office play the main internal coordinating function, together with Regional Strategy Committee.

Adjunct appointments : No.

Regional ICT infrastructure : the University has played a leading role alongside the RDA in recent years in promoting and co-ordinating support in e-enablement (especially e-commerce and e-learning) with regional organisations in the public and private sector

Human and financial resources.

HR policy and region : relevant staff development activities (e.g. AURIL) funded and/or delivered at the University level.

Staff rewards : expected to be part of normal allocated duties for staff.

Funding streams : managed through Regional and European Office and central budget allocation process. Each University School and central service has a fully devolved budget, including staffing, that takes account of regional funding streams.

Embed new financial responsibilities : embedded through relevant staff development support plus annual planning process. Regional role is funded at University level with expectation that most regionally funded activity will be at FEC.

New funding streams : Framework 7 plus new regional priorities such as Centres of Excellence and Design. REO leads on Framework 7 whilst SMT deal directly with ONE on issues such as Design.

## **Institutional capacity building for regional involvement – Sunderland University**

The University of Sunderland's commitment to relevance to business, industry and the community and to be at the heart of local regeneration and regional economic development has been an explicit component of the University mission for the last 10 years. For example, the University Strategic Plan of 1991 indicated a "commitment to effective partnerships including interfaces with industry, business and the community and a major input into shaping the new Sunderland".

The fortunes of the University and the northeast region are closely related as demonstrated by the following figures. The University recruits 65% of its full time students and 76% of its part-time students are from within the region. In terms of income from engagement with business and the community, 68% of consultancy income, 83% of income from courses for business and the community and 91% of income from equipment and related services are regional.

Although there was commitment to regional involvement activities 10 years ago tended to consist of numerous, isolated short bursts of activity, often supply-driven, operating at the periphery, undertaken by a small group of academic activists, and funded on a project by project basis. It tended to lack continuity, corporate co-ordination, strategic cohesion and appropriate levels of institutional or core funding. This began to change towards the end of the 1990s, for example, the 1999 University Senior Staff Conference had a focus on the Regional Economic Strategy, with active participation of the Director of the Government Office North East and the Chief Executive of the regional development agency (One North East) – the first time either had been invited to a senior staff event at any University.

Regional involvement began to be mainstreamed into University management and procedures. The Vice Chancellor took a personal role in promoting increased involvement

and a Deputy Vice-Chancellor took responsibility for regional activities. A Business and Community Strategy was developed with monitoring of progress against targets at the Executive, the Executive Board and at a newly formed Reach-out Committee. An annual planning framework, designed to work in an integrated manner, required all Schools to consider local and regional aspects to their teaching, research and reach-out as components of their strategic plans.

The Industry Centre was firmly established in 1994 with the mission “To be the primary link between the University’s expertise and its clients and partners in the development of practical business solutions which meet their needs and anticipate the changing demands of their markets, and which support the development of the local economy and the learning and research services of the University”. It was designed as a ‘one stop shop’ for business and the gateway to Knowledge House, which networks all five North East Universities in providing support for businesses. Staff dedicated to coordinating regional activities and funding were appointed within Planning and Market Research Services as the University began to understand and make use of EU structural funds to support regional initiatives.

In developing regional initiatives the University discovered that lack of capacity to deliver within the academic community, particularly at certain times of the year, could compromise the ability to offer quality services. As a result it began to use project funding to recruit staff with a business background to work alongside academic experts to round out the service offering.

The University, which had considerable expertise in developing a campus-wide ICT network, took a lead role in assisting with the development of a broadband infrastructure within the City of Sunderland that could be used by the community, for example, linking a series of Electronic Village Halls. In addition it assisted the metropolitan area network used by the region’s universities to become part of a regional ‘network of networks’ that helped to give the northeast an early lead in the development of a sophisticated regional ICT infrastructure.

The University took the lead in developing a regional project, CuPiD, to provide comprehensive training against a sophisticated training needs analysis for staff with reachout and regional responsibilities. This has subsequently developed into a national programme and part of a pan-European project.

Academic staff are allowed up to 30 days of consultancy to work on activities that can be regional, national or international via the University Code of Practice for External Work. Staff who wish to become engaged in regional activities can compete for Enterprise Fellowships and Community Fellowships.

External funding streams are co-ordinated by Research, Development and Innovation Services (RDIS) which has a pre- and post- award team to assist Schools and Academic Areas. Once funding is approved finances and management are devolved to the Schools and Academic Areas as transparently as possible. The University provides staff training in project management and project finances to assist academic staff take responsibility for projects. For large scale or complex projects RDIS will take a more proactive role.

The University monitors regional, national and European sources of funding that meet both its aims and objectives and those of the regions business or community. For regional activity the Regional Economic Strategy helps the University to check whether proposed new activities are in line with regional priorities. The project-based nature of regional funding has become less of an issue to the University as HEROBaC and HEIF funding has been used to even out peaks and troughs. As a result of this dedicated funding all significant academic areas in terms of regional engagement now have dedicated Business Development support for such activities.

RDIS at the University has appointed an Assistant Director for external activities. The postholder is responsible for ensuring that the University participates in key stakeholder meetings and committees to link University and local/regional strategies. Activities with

other regional universities are either brokered via UNE, sub-regional partnerships or bilateral relationships based on common interests.

The University encourages its staff to become involved in regional activities and just under half do so. There are no major significant cultural obstacles to adopting greater regional engagement although it is noted that an increased focus on the next RAE is currently distracting some staff from regional activities.

The University's Corporate Plan acknowledges that the University has a vital role to play in supporting the Regional Economic Strategy. It notes that:-

“The challenge for the University is to deliver motivated, rounded and well educated individuals into the community and labour market who will bring with them a level of ambition and energy which will support and indeed lead the North East economy forward, and further develop social and cultural capacity. The University also needs to ensure that it is able to generate the funds to provide a level of support for business in the region through the knowledge and expertise of its academic and other staff”.

In particular it explicitly states a strategic aim to “...work with the City of Sunderland and other civic and regional agencies to raise the profile and image of the City and North East of England; and in partnership help secure the economic, social and cultural regeneration of the City and region”.

## **Institutional capacity building for regional involvement – Teesside University**

*To what extent have academic leadership and central management been altered to engage with regional needs?*

The University's Vice Chancellor has a specific interest and role in regional engagement. Both Deputy VCs carry a responsibility for the regional dimension of teaching & learning, research and enterprise; while academic Schools structures mirror these responsibilities. Assistant/Deputy Dean posts with responsibility for Academic development, research and enterprise respectively have been established in all schools, and each of these roles has a strong focus upon regional engagement. Centrally, over the past 10 years or so, structures have been modified to support regional engagement in a systematic and informed way. The Department of Academic Enterprise provides strategic and operational support across the institution for the development and delivery of a wide range of regional economic development and regeneration activities, and acts as the interface with regional and local agencies in the public, private and voluntary sectors.

*Does the institution's strategic plan include its relationship with the regional community as a key strategy for enhancing viability?*

The University of Teesside Corporate Plan explicitly outlines its commitment to making a substantial contribution to the development of the sub-regional and regional economies.

*What are the main channels of communication between regional stakeholders and the institution (senior managers, committees, etc) and who is responsible for regional decisions in the institution?*

Senior managers of the institution, from the VC down, represent the University on regional and sub-regional boards and committees. The University's Board of governors comprises representatives from the public, private and voluntary sectors in the region. There is regular communication at both strategic and operational levels with regional stakeholders. Channels of communication into the University are very open: senior management are highly accessible; and there is a general culture of ensuring appropriate external representation on University groupings. Strategic regional decisions are taken by the VCE and the Corporate Management Committee. The University's Enterprise management Group, with senior

representation from across the institution, provides support and advice for decisions relating to third stream activity.

*What internal mechanisms exist for co-ordinating regional activities within the institution especially in relation to funding issues and what new posts/ offices have been created with an explicitly regional local remit?*

The Department of Academic Enterprise, working to the DVC (Research & Enterprise) has responsibility for ensuring that regional activities are effectively co-ordinated within the University. Regional and European funding bids, along with project development and management activity, are part of DAE's remit, and a special team is in place to support Schools and departments in this. All posts in DAE have a strong emphasis upon regional development activity. Assistant and Deputy Deans for Enterprise, working with Business Development managers, have an explicit remit to promote and coordinate regional development activity within Schools, although this focus is not of course an exclusive one.

*Does the institution use adjunct appointments to add expertise to its capacity?*

Not to date. However, in a number of areas it makes use of mentors, for example mentors with business development backgrounds to support graduate entrepreneurs; and student mentors to support schoolchildren in raising aspirations initiatives.

*In what ways is the institution responding to regional ICT infrastructure and is it adopting new technologies to restructure their own management structures?*

The University has a proactive ICT support service that works to ensure that use of ICTs in supporting decisions and activity is maximised. It has a very strong focus upon ICTs and digital media in terms of its academic strengths; and this is reflected in the wide range of ICT-based initiatives that have been developed and implemented in support of the regional agenda. They include the New Technology Institute, to support adoption of high-level ICTs by regional companies; community informatics, to support community development through ICT use; and DigitalCity, a major initiative to promote economic growth in the Tees Valley which is highlighted elsewhere in this report.

## **Human & Financial resources management**

*How is the regional dimension incorporated into the human resources policy of the institution?*

Recruitment and staff development are conducted within the parameters of the University's overall strategy, reflected in its Corporate Plan. As a result, the importance of regional engagement is implicitly recognised. The Personnel Department has specifically designated one of its managers as responsible for the support of enterprise/regional engagement.

*What training is given to staff with regional responsibilities? How are staff rewarded for regional engagement?*

Staff with regional responsibility are given access to a wide range of staff development programmes, from practical residential courses (eg those run by AURIL) to academic programmes, with conferences, seminars, and so on in between. A major part of staff development in this area is the opportunity for exchange of experience and best practice through network activity – this is central to regional development work.

Staff with a specific remit for regional engagement are expected to undertake duties as part and parcel of their role. However, both they and other staff who engage with the regional agenda have the opportunity to network, exchange experience (as above) and attend regional events – this type of activity can help to influence regional policy thinking.

A new consultancy policy allows staff to undertake consultancy for up to 30 days in any one year. The University operates an Enterprise Development Fund that provides financial support for staff seeking to develop new ideas, products or services with regional benefits.

*How are regional and national funding streams managed? What are the possibilities of financial decentralisation within the institution?*

Mainstream national funding streams are managed centrally, by the VCE, with the Department of finance taking operational responsibility. Schools and department \are allocated their own budgets to manage across an academic year.

Initiative-based national funding streams are managed as appropriate: for example, academic enterprise manages HEIF monies; while the Centre for Lifelong learning manages Aimhigher. Regional funding streams are co-ordinated through the Department of Academic Enterprise.

*How does the institution embed new devolved financial responsibilities into academic life?*

Through staff development, mentoring and assistance from support services.

*How are new resources for regional engagement and activity generated? Who pays for the regional role of the institution?*

Largely through regional funding streams. The regional role is funded by the institution itself, although some posts are externally supported.

*What new regional funding streams are emerging which the institution can tap into? What mechanisms are being established to tap into these sources?*

HEIF is a major developing source of funding support, although its focus is not specifically regional. The University is looking to work closely through the Tees valley partnership and directly with the RDA on the delivery of regional initiatives: DigitalCity is a case in point. With the demise of European structural funds, the University is facing a significant loss of support from 2006 onwards. This will be most keenly felt in the area of postgraduate recruitment: ESF has been a significant support in funding regional recruitment to masters' programmes, helping with graduate retention and with support for local and regional SMEs. There is no real replacement for this.

The University's Enterprise strategy places a strong emphasis upon generation of commercial income as part of – but not as the total basis of – a sustainable approach to regional engagement.

### **Creating a new organisation culture**

*Are there any significant cultural obstacles to adopting greater regional engagement within the institution (i.e. the connotations which regionalism has with parochialism, newness, and unsophistication)? What efforts have been done to overcome these embedded connotation, if any, with the institution?*

Regional engagement has not presented any particular cultural problems at the University. See below for statements on teaching and research. The availability of regional funding, along with the provision of direct support within the institution with sourcing grant, project management, and the development of new opportunities for external engagement, along with the growth in importance of the RDA and associated regional structures, have played a large part in promoting third-stream activity. The University has set up structures, now embedded in schools through Assistant Deans for Enterprise, to support the further development of regional, though not exclusively regional, engagement.

*Is regional engagement part of the institution's mission? Has regional engagement become part of the academic mainstream of the institution? For instance, how far this has influenced mainstream teaching and research?*

Regional engagement is integral to the mission of the University of Teesside, and is made explicit in the mission statement. Over 60% of its student intake comes from within the NE; and over 50% of students are part-time. Although clearly courses seek actively to recruit nationally and internationally where appropriate, academic programmes across many disciplines are informed by and promote participation in the region (student placements and



projects being a prime example). Schools and colleges liaison work, a key feature of the widening participation strategy, plays a significant role in engaging with primary and secondary schools as well as the FE sector in the NE. Much, though by no means all, research activity has a strong regional focus – in areas such as health, social sciences, and some areas of digital technologies. The University's Students' Union strongly promotes active participation by its members, and runs a wide range of initiatives that help students to get involved locally.

## **University of Durham Regional Outreach Strategy 2004-07**

Our world-class research, combined with enthusiastic and highly qualified staff, places us in an excellent position to support the creation of a knowledge-based economy in the North East of England. The North East Regional Development Agency, One North East, particularly through its Strategy for Success, has identified a clear role for universities in this region in the creation of a new type of economy which constitutes a step-change from traditional primary industries and heavy manufacturing. The University is already actively engaged in this agenda. This Strategy identifies how the University might develop current activities and achieve significantly more over the period 2004-07. It informs Faculties and Departments and enables them to respond to the recommendations and develop their own outreach strategies in line with these recommendations in support of the Universities aims to:

- Engage with local and regional communities
- Be one of the UK's top 5 providers of a student experience
- Ensure that by 2007 all our academic areas are of international research excellence.

The Strategy also provides the basis for the University's HEIF 2 proposals.

Summary of the Strategy's Main Aims:

### 1. Knowledge Transfer

#### 1a) The Commercialisation of IPRs:

- To exploit the University's IP as an essential function supporting Research and Outreach/ Regional Engagement through for example licensing, spin-out, and joint venture
- To maximise returns to the University through these activities, judging each project on its merits and being mindful of the potential benefits to the regional economy and its sub-regions.
- To develop and maintain management structures that enable the Strategy

The main regional engagement priority for the Group is technology transfer in the areas of science and technology relating to ONE North East's 5 Centres of Excellence

#### 1b) Teaching and Learning through degree programmes, short courses, seminars and public lectures.

- The University will develop and deliver bespoke courses for specific customers at degree and post-graduate levels; short courses; and seminars
- An annual series of high profile public lectures/debates/discussions on landmark topics to raise the profile of the University

#### 1c) Expert Consultancy through, "Knowledge House", individual consultancy.

- The University will continue its support for Knowledge House
- All members of staff undertaking individual consultancy will be required to conduct their consultancy work through a new University company (CONCO)

#### 1d) Major Projects.

- The University will support major projects delivering expertise that meet a specific regional need; are in line with the University's regional/outreach strategy; and mutually support the University's research and/or teaching missions
- The University will use REDSS to help obtain external regional funding to operate these projects. The main priorities will be projects that relate directly to One North East's Regional Economic Strategy and/or the relevant sub-regional strategies; the University's 175 Campaign: and, support the University's research and teaching missions.

#### 1e) Business Relations

- The University will continue to operate and develop business support services through REDSS.
- Continued involvement in KTPs and Faraday Partnerships. Greater involvement in the LINK scheme to be explored.

#### 1f) Development of Enterprise and Entrepreneurship

- Short courses focusing on enterprise/entrepreneurship will continue to be available for all staff and business-start-ups building on existing programmes developed through the NECSE and HEROBC programmes.
- The development and implementation of an Enterprise Education Strategy for staff, students and Alumni by the University Business School will assist in this process and will contribute to the achievement of targets set in the HEROBC programme for staff undergoing entrepreneurship training.
- Durham University's Business School will continue to collaborate with Newcastle University Business School, and the Regional Development Agency in developing an Academy for Business Innovation and Enterprise

### 2. Enriching Culture and Sport

- The strategy for developing existing or introducing new cultural and sports activities will be primarily based on academic aspirations and opportunities presented by departments and Faculties in their Annual Departmental Plans. Activities delivered under this heading may also contribute to the development of projects under 'Disadvantaged Communities' (see below)

### 3. Disadvantaged Communities

- The feasibility of establishing a social/community-oriented 'Institute' based on the successful model developed by Duke University in North Carolina, which targets university expertise at disadvantaged areas on a voluntary basis to be explored.
- Other activities which support disadvantaged communities will be primarily based on academic aspirations and opportunities presented by departments and Faculties in their Departmental/Faculty Plans and the implementation of the University's plans for widening access.