

Response to the Lambert Review from the North West Universities Association (NWUA)

INTRODUCTION

This submission by NWUA, the organisation representing the sixteen higher education institutions in England's North West, specifically addresses the regional context of business/HE interaction. However, much of the content also is relevant to the business engagement of the sector on a local, sub-regional, national and international level. The submission firstly gives some background context, goes on to describe the breadth and depth of higher education interaction with business in the region, and finally makes specific responses to the posed questions.

THE CONTEXT IN ENGLAND'S NORTH WEST

The impact of higher education institutions (HEIs) within their regions is substantial and unique. Higher education is a significant sector in the economy of England's North West. The region has 9 universities¹, two higher education institutions with degree-awarding powers², 5 other higher education Institutions (HEIs)³ and numerous further education colleges offering higher education in the local community. The combined turnover of the HEIs is over £1.3bn with an overall economic impact in excess of £3bn. The institutions employ more than 25,000 people and there are at least 200,000 HE students studying on degree and similar programmes in the region. Almost 10,000 jobs are created in the region as a result of the knock-on benefits of HE activity.

Through their core activity these multi-million pound businesses nurture and develop the talent, knowledge and skills of people to underpin a sustainable, vibrant economy. They challenge the boundaries of knowledge to drive innovation and forward-thinking in all sectors. They engage with practice to ensure discovery and

¹ The University of Lancaster, the University of Central Lancashire, UMIST, The Manchester Metropolitan University, The University of Manchester, The University of Salford, Liverpool John Moores University, The University of Liverpool and the Open University in the North West

² Bolton Institute and Liverpool Hope University College

³ Chester, Edge Hill, St Martin's, the Royal Northern College of Music and Cumbria Institute of the Arts

invention has relevance and impact for the good of society – economically, socially and culturally.

The challenge is to find ways in which the region's businesses can directly benefit from this range of core services. The aim being that, in increasing numbers, they routinely use their HEIs for research and development, consultancy, technical services and commercialisation activities. Moreover, it is important that graduates are able to enter the region's workforce and those in employment can take courses, either full time or part time, appropriate to business and individual needs.

HEIs are raising awareness of the availability of services, providing easy access routes, generating demand, developing institutional infrastructure and establishing appropriate links with key stakeholders. The aim is to establish the habit for HEIs, business and the public sector to work together routinely through a wide range of 'transactions'.

HE INTERACTION WITH BUSINESS IN ENGLAND'S NORTH WEST

In England's North West, there is already a considerable amount of activity that directly supports businesses, both existing and emerging. Examples are given in the next sections of how the sector in England's North West is addressing this agenda under the headings of

- Developing the Research Base,
- Growing the Business Sector - spin-outs, company formations and spin-ins
- Knowledge Transfer
- Business Competitiveness and Skills

Further details, including many specific examples from individual HEIs, can be obtained from the NWUA website (www.nwua.ac.uk) and the Universities UK Publication – The Regional Mission, The Regional Contribution of Higher Education, The North West (downloadable from www.UniversitiesUK.ac.uk/regionalmission).

Developing the Research Base

The region's businesses benefit substantially from an extensive and leading-edge research base. Research is a core higher education activity and the HEIs in

England's North West are conducting research of national or international excellence across a wide spectrum of subject areas. The national Research Assessment Exercise (RAE) results published in December 2001 confirm the international quality of this research.

Much of this research is already supported by long-standing collaborations with regional, national and international companies and has contributed significantly to the competitiveness of key regional industrial sectors. Collaborative research allows companies to access academic staff, leading-edge research and state of the art facilities. In 1999/00 over 10% of the region's external research grants and contracts were funded through collaboration with industry.

Over recent years collaborative research and the commercialisation of research have grown in importance and the scale of collaboration between institutions, national and regional agencies and industry has correspondingly increased. The sector is committed to maintaining and developing its research base in partnership with business.

Already much has been achieved in developing the region's research base in conjunction with national and regional priorities, especially in line with the target and established industrial sectors identified in the North West Regional Economic Strategy. All HEIs are developing links to industry both through collaboration and technology transfer. Several HEIs have established research centres of excellence to match key industrial sectors and to promote business-focussed research in key technologies. The North West Universities Association has identified leading academics in the North West to act as contact points for the particular industrial sectors identified in the Regional Strategy.

The strategic alignment of research expertise and regional economic priorities can lever in significant levels of investment and funding and the region's HEIs have become adept at maximising funding opportunities to develop projects with multiple benefits.

The important feature of all these and many other developments is how a strategic alignment of research expertise and regional business priorities can lever in significant investment and funding. HEIs are committed to the development of the research base necessary to support and enhance the competitiveness of key

business sectors. They have been successful in this aim by utilising a wide range of government initiatives including University Innovation Centres, Technology Foresight Centres and by attracting support from the business sector itself.

The sector specialists, mentioned above, together with the KnowledgeNorthWest brokerage service (see below) can help companies access the latest research of relevance to their industrial sector. However, the HE sector believes this approach has its limitations and is seeking to develop a much broader interface between industry and academia through the formation of 'academic clusters'. These clusters would include a broader range of academic expertise to permit more effective communication with industrial clusters, would build up critical mass and open up new areas of research, particularly those at the boundaries of traditional disciplines. Such clusters may exist in 'innovation zones' across HEIs or in 'innovation centres' within a single institution. The model promotes multi-disciplinary collaboration, especially with disciplines outside science and technology such as management.

In addition to this regional perspective, the HE sector has a longer-term, national and international perspective on the development of research and invests in new areas of research, areas which may well be the emerging industrial sectors of the regional economy in 5-10 years time. The HE sector works with regional business to lobby central Government on the importance of maintaining the international excellence of the research base in England's North West.

Growing the Business Sector - spin-outs, company formations and spin-ins

HEIs in England's North West have been particularly active in commercialisation of research through company formation, licences and incubation, one of the North West Regional Development Agency's strategic priorities for new business growth. All the region's universities offer supported incubation facilities for companies starting up as spin-offs from research activities or for other young companies who require access to HE-based R&D and IT support. Many HEIs also offer support to staff and students who want to establish new companies providing access to seed corn or venture capital funding and business support.

Higher education is also involved in larger-scale business and science parks. These often attract new spin-in companies, created separately from the higher education research base but attracted by access to research expertise and innovation.

Several HEIs include enterprise skills in the curriculum to encourage company formations and spin-outs, for example, offering under-graduate and post-graduate courses in enterprise and business development.

Knowledge Transfer

Although links with national and multi-national companies are well-established, the full potential of academia-industry links has yet to be realised. In particular, only a small percentage of SMEs routinely accesses HE expertise and benefit from knowledge and technology transfer. Universities and Higher Education Colleges in England's North West aim to overcome this by developing new mechanisms for encouraging business access to the expertise of the higher education sector. Several institutions have established one-stop shops for companies, especially SMEs. The North West Universities Association has established KnowledgeNorthWest, a knowledge and skills brokerage service. This service is available to all companies in the region but, by working closely with the Small Business Service, it is particularly aimed at improving interaction between the higher education sector and SMEs. Further details of KnowledgeNorthWest are included in Appendix 1.

HEIs run many successful Teaching Company Schemes where recent graduates work on specific R&D projects in a local business under the joint supervision of the HEI and placement company. For the region as a whole, over 200 Teaching Company Schemes have been successfully completed, with each scheme on average resulting in an increased annual profit of £125k and creating between 4 and 5 new jobs.

The HE sector is developing a strategic and comprehensive approach to business support, in particular to take advantage of the opportunities offered by EU funding. HEIs have access to significant amounts of match funding that can lever in EU funds. Through their significant level of regional engagement and cross-cutting activities, HEIs have been able to assemble large portfolios of activities and projects to support businesses in the region.

The CONTACT Partnership, working on behalf of the Objective 2 HEIs in England's North West, has brought together 83 projects in a Knowledge Based Action Plan, designed to improve the regional impact of knowledge, innovation and technological

exploitation. Overall the projects will receive £24m of European Regional Development Fund (ERDF) resources and £68m of funding in total. Many are aimed at developing SME links with the HE sector and include:

- HE/SME cluster, sector and supply-chain network development
- Developing and supporting a learning culture with and amongst SMEs
- Encouraging SMEs to expand their internal company knowledge base by increasing graduate and postgraduate recruitment
- Facilitating SMEs to access HEI academic and technological resources

The CONTACT Partnership has also received approval for a Virtual Economic Development Zone project, attracting £14.4m of ERDF, in a project worth £30m in total. This is a knowledge-based virtual cluster which supports the North West Innovation Strategy. It will help develop the technological infrastructure for HE/SME interaction by exploiting the ICT expertise of Net North West, an innovative and powerful communications network which links the region's university and college campuses, NHS sites, science and business parks, local government and other public and private sector bodies.

Through the Objective 1 Programme in Merseyside similar HE support for businesses is being developed. For example a consortium of all the Merseyside HEIs has been established to deliver higher skills for Merseyside SMEs.

Business Competitiveness and Skills

The higher education sector contributes directly to business competitiveness through the provision of higher-level skills and training for local businesses and the provision of a highly-skilled graduate pool of potential employees.

The need to improve entrepreneurial skills also is being addressed. A consortium of NWUA institutions has developed a new Masters of Enterprise degree. Through the principle of action learning, it will enable SMEs to develop their business improvement skills and develop the concept of enterprise. An exciting spin-off from the MEnt programme has been the 'Action Enterprise', a web-based enterprise programme for 14-25 year olds.

In addition to developing industry-specific skills, many HEIs in England's North West now place emphasis on the development of generic employability and enterprise skills in their student body. The traditional sandwich year-out in industry or abroad is losing popularity (due to financial constraints on students) but increasingly, undergraduate courses include work placements or project work with local SMEs to develop workplace skills.

High-level ICT skills in the region's workforce will be crucial to the continued development and competitiveness of the region's businesses. The HE sector in the region has particular strengths in ICT research and training and many institutions have responded positively to the changing skills requirements of this industry by developing new courses in multi-media and digital technology. A brochure, specifically targeted at business, detailing the HEI ICT capability has been published recently (available for download at www.nwua.ac.uk)

The higher education sector in the North West has particular strengths in management training, ranging from training for national and multi-national companies (based on research of international excellence) to training geared to the needs of SMEs.

Higher education institutions regularly work with employer and professional organisations to ensure curriculum relevance. HEIs also work closely with representatives of local industries to ensure skills shortages and requirements are met.

HEIs in England's North West are very successful in developing the skills and talents of students from the region and in attracting talented and skilled individuals from outside the region to study in the region. Of the region's first degree students who graduated in 2000 and entered employment, nearly 65% remained in the region. There is over-representation of new graduates in the region, compared with the labour force as a whole.

The HE sector also is engaged in activities that help ensure that talent remains in the region's businesses. Experience indicates that students who develop links with the locality outside HE are more likely to remain. Students are increasingly participating in work placements and working part-time while studying. The new emphasis on entrepreneurship, company formations and spin-out companies is contributing to the

retention and attraction of talented graduates in the region. The excellence of the region's universities and higher education colleges is a mechanism for retaining and attracting talented individuals for post-graduate study and/or employment.

The region has also developed specific projects to help improve opportunities for graduates who wish to remain in the region and also to help local SMEs and local businesses access new graduates. North West Students and Graduates Online (NWSAGO, www.nwstudentandgraduate.ac.uk) is a regional collaborative initiative, involving higher education careers services and business support services, to establish a single integrated online service for businesses, students and graduates in the region.

QUESTIONS FOR CONSULTATION

Question 1

We would commend to you the integrated and collaborative approach being pioneered in the England's North West. Individual HEIs will cover specific examples of individual good practice in their responses. Exemplars of collaborative activity include

- the Knowledge Based Action Plan and Virtual Economic Development Zone (p5 & 6)
- the KnowledgeNorthWest brokerage service (appendix 1)
- the innovation zones concept identify clusters of academic expertise across HEIs to both support existing and catalyse emerging business clusters (p4)
- people based knowledge transfer schemes such as NWSAGO (p8) and TCS (p5)
- enhanced incubation facilities closely linked to HEIs (p4/5)
- science and knowledge parks (p4/5)
- enhancement of the 'enterprise curriculum' (p5 and p6)

The North West Development Agency (NWDA) has been actively involved in all of these areas and a close working relationship has been developed between NWUA and NWDA. The importance of the regional HE sector to the regional economy is clearly reflected in the revised regional economic strategy recently launched. Links with the Sector Skills Council have not been developed as yet, but linkages are progressing with the local Learning and Skills Councils.

Regionally, the sector is looking to facilitate more successful partnerships by working closely with the developing sector organisations, both on an individual basis and collectively. We need to promote a more comprehensive engagement with these processes throughout the academic community. The sector, the NWDA and business itself needs to consider ways in which the benefits to the academic community of enhanced links with business can be promoted. Anecdotal evidence would lead us to believe that in England's North West there has been a significant rise in relationships over the past four or five years. At the regular meeting between Vice-Chancellors and the North West Business Leadership Team (representatives of the major corporate interests in the region) these issues are discussed.

Question 2

The nature of links between business and HEIs is complex because of the multi-faceted nature of the interaction. The barriers to strengthening relationships will vary between institutions, because of their diverse nature, between business sectors, according to the size of the business and with the nature of the knowledge to be transferred. There is no simple answer to this question. Institutions will articulate institutionally specific views in their individual responses, but a few common themes will be drawn out in this response.

Inevitably resources pose a barrier to the development of enhanced structures for business support. Services that are commercially viable can be developed by individual HEIs in line with institutional priorities and missions. This aspect is a matter to be covered in individual institutional responses. The issue of enhanced public resources for HE Business interaction relates to;-

- The provision of services to business that are not commercially viable but are accepted by government and responsible agencies as being necessary for local, sub-regional, regional or national economic development
- Seedcorn funding in cases where the commercial development risk is beyond that reasonably acceptable to an individual HEI
- The development of infrastructure within and between HEIs for more effective liaison with and support for business.

Additional resources clearly would stimulate further activity. However, the extent of the resource available is not the only barrier to increased activity. There are many

schemes, operating at European, national, regional and sub-regional levels, by which public resources are employed to enhance higher education business links. We share the view of business that there are too many schemes and that the mechanisms for applying for funding are complex and over-bureaucratic. Whilst we fully support the need to properly account for public expenditure, the audit process for public funding, particularly European funding, is too burdensome, with programmes being the subject to several audits which are essentially identical. Such complex processes act as a disincentive for both HEIs and businesses.

A further barrier is simply the lack of understanding between the HE sector and business. The academic community has increased its awareness of the needs of and priorities for business, but more can be done. Similarly the understanding of the constraints on the HE sector is often poorly understood by business. In England's North West we are working to lower these barriers through our engagement with the NW Business Leadership Team, the regional CBI and the regional Chambers of Commerce.

It is also important that intermediaries understand the both sides of the relationship. We have expressed a clear desire to improve our relationship with local Business Links and already have good relationships with SBS in the region. We look forward to continuing to work with the NWDA led regional LSC/SBS joint pilot to improve this understanding.

Question 3

HEIs in the NW are working with business to assist graduate and postgraduate attraction into business. The existing people based schemes already mentioned (NWSAGO and TCS) are strong mechanisms for both exposing students and graduates to a commercial environment and increasing dialogue between business and HEIs. The increasing involvement of HEIs in business sector developments and the development of sector science strategies by the NW Science Council is assisting HEIs in identifying the higher level skills needs of the business sectors. A number of mechanisms are applied, informed by the developments, to increase the number and quality of graduates and postgraduates:-

- Enhanced placement opportunities
- Industry linked modules in the undergraduate curriculum
- Postgraduate courses tailored to business needs

- Enterprise in the curriculum

We feel that much has been done in these areas in England's North West, but we recognise that there is a need for greater progress. Both in our response to the skills theme in the revised regional economic strategy and in our developing relationship with the regional Framework for Employment and Skills Action (FRESA), we have indicated our willingness to work with regional stakeholders on these issues.

Question 4

The main funding streams for UK HEIs support teaching/learning and research. As outlined above it is possible to support business by imaginative use of these funding streams, but the essential focus and required outputs are not explicitly related to business needs. Several initiatives have been introduced by the UK government over the last decade to stimulate HE 'reachout' to business. Inevitably these schemes, and the projects supported by them, have a significant focus on local, sub-regional and regional development. European structural funds have also played a significant part in enabling HEIs to support business.

However, the funds allocated are relatively small compared with 'mainstream' funding and are often subject to bidding processes that consume valuable resources. The single factor in the UK that would enable a greater contribution to be made would be to provide HEIs with an **additional** substantial stream of core funding to support business. Many of the areas described above would benefit from funding in this way. Institutions should have the freedom to deploy such funding by responding to the market need in ways that are in accordance with individual institutional profiles and strengths. Clearly, HEIs must be accountable for the way in which such funding is spent and be able to demonstrate that they are effectively meeting the needs of the business community. However, the reliance on simple quantitative targets in this complex area of interaction should be avoided.

The Question of Governance

We fully support the notion that HEIs should be governed and managed well, and, given the substantial investment of public money in the sector, we accept that government needs to be confident that this is the case. Across the sector nationally, there is a wide variety of approaches to governance. In England's North West the business community participates in governance through significant representation on governing bodies, representation that brings considerable experience to the workings of these bodies.

We are confident that the overall picture in the North West is of well-managed institutions, within the constraints imposed by the nature of institutional funding and operations. Transactions with business, in particular, tend to be limited by these constraints. The issue of the balance between funding streams has been mentioned above. Additionally, because of the nature of custodianship of public funds, HEIs cannot take commercial decisions that involve a degree of risk in the same entrepreneurial way that is found in the business sector.

We are not complacent and we welcome any consideration of the effectiveness of HEI management that is based on evidence and recognises the context in which institutions are managed.

KnowledgeNorthWest

KnowledgeNorthWest is a not-for-profit knowledge brokerage service managed by the North West Universities Association as part of its objectives to facilitate knowledge transfer between HEIs and businesses in England's North West and beyond.

KnowledgeNorthWest's enquiry officers process a company's enquiry, circulate it to dedicated representatives at the region's higher education institutions and send a reply to the enquiring company within five days. This is all done at no charge to either party, thanks to funding from the North West Development Agency, the Higher Education Funding Council for England and the European Regional Development Fund. Subsequently, the client company and Higher Education Institution agree any commercial arrangements that are appropriate between themselves.

This unique, five-day process ensures that all enquiries are responded to and will not hold up business activity – the academics and researchers contacted by KnowledgeNorthWest having clearly stated that they are available and want to work with the business. KnowledgeNorthWest and its website **www.knowledgenorthwest.com** were launched in November 2001 and since that date have handled over 400 enquiries, now at a rate of 50 enquiries per month with a target to double this by the end of the year.

As an example of the way in which the KnowledgeNorthWest service supports knowledge transfer collaboration Techsafe Consultants based in Cheshire contacted KnowledgeNorthWest with a request to find academics with experience in sustainable demolition techniques. Using the enquiry service Techsafe was able to identify an expert in demolition techniques at UMIST. Using high powered laser techniques, Professor Lin Li and Techsafe were able to submit a joint proposal for £240,000 to the Carbon Trust (<http://www.thecarbontrust.co.uk>) to pursue this venture. A final decision on the success of the proposal will be reached in June 2003.

KnowledgeNorthWest also is exploring ways of bringing together the academic and business communities. For example a series of "Shape of Things to Come" meetings - free, regional events that allow small-to-medium sized businesses to interact and

network with lead academics within their chosen industry sector. Two events have been held since November 2002 attracting over 150 businesses and 40 academics. Early plans for two further events are already underway.

These highly successful meetings enable lead academics, nominated by their peers or institutions, to host breakfast table discussions around key sectoral issues and latest developments with up to 12 businesses from each of the NWDA-identified priority sectors.

The sessions have begun with 45 minute round table discussions, followed by a 25 minute presentation by futurologist Dr James Bellini. The opportunity is also taken to present information about NWUA, and, where appropriate, the sponsoring organisation.

Shape of Things to Come is aimed at bridging the gap between academia and business and providing delegates with a glimpse into what the longer term future of a particular industrial sector might look like based on academic research and experience. This provides an excellent opportunity to highlight the resources available from Higher Education to help firms prepare and plan for that future.

Feedback identifies that over 70% of delegates wish to be contacted with further information on the availability of HEI expertise and resources within a month of the meeting. Examples of areas in which support was sought by businesses include market research, website development, access to research and development, graphic art and sourcing graduates and placement students.