

Response to Lambert Review

Response prepared by:

Prof J M Bainbridge OBE
CEO EPICC LTD
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Q1 Best practice in Business-University Collaboration

A) The RDA One North East has developed the acclaimed Strategy for Success and has set up 5 centres of Research Excellence based upon Industry Sectors where there is considerable regional representation coupled to University Research Excellence (5 or 5* RAE grading). These will access leading expertise nationally and internationally and all have Industry led Boards to ensure that their activities remain industrially relevant. Their development is being overseen by the Regional Science and Industry Council. Development of local partnerships and meeting regional skill needs are seen as a priority, especially for institutions classes as lower research intensity. Best fit with institutional expertise and response to actual business demand are key to success. The geographical focus may be local town or city, sub regional or regional (in the sense of government administrative region). However, in niche areas it is important to evidence national significance in niche areas. For example, Teesside University gives priority to business sectors or clusters in digital media and virtual reality, ICT, cultural and creative sector, Food and both Base and speciality Chemical sectors.

Many regions are characterised by a multitude of business support organisations, many of which are based in Universities, to be effective they need identify and be responsive to actual industry needs. A good case in point is EPICC (European Process Industry Competitiveness Centre) established in 1995 by the University of Teesside this now has an in excess of 200 company members and has been designated as a European regional centre of Excellence for SME support. Currently EPICC is being integrated into one of the Regional Centres, the Centre for Process Innovation (CPI). EPICC currently receives public support from ESF/ERDF/SRB but approximately 40% income is generated from public funding streams

EPICC is working actively with Cogent (The sector skills agency for the chemical Manufacturing sector) across a range of initiatives including skills audit and needs analysis, Foundation degree development and evaluation and leadership activities.

B) Successful partnerships must be predicated upon mutual understanding across the Industry /Academic interface and it is vital to recognise the importance of individuals of stature who can command respect across this interface.

Q2 Barriers to Successful Partnerships

A) In addition to the comments above, the main barrier in the past has been the low priority given to these activities by the University Sector and the lack of communication with industry /commerce. Implementation of 'third leg' funding

streams as described in the recent White Paper 'The Future of Education and Skills' should finally remove the barriers. However it will be important that this activity is conducted within a strategic framework as described in 1

B) Businesses and Universities must identify the resources that might be shared and both must understand the conflicts of pressures of timescale/resource utilisation etc. In terms of human resources secondments from academia to industry and vice versa are beneficial. Reward structures, career paths etc must be developed to deliver third leg activity in Universities.

C) There is great variation in the nature of institutions across the University Sector in the past, some institutions have actively engaged in business collaborations and others who have had minimal dialogue. The current agenda will encourage meaningful dialog but must be supported by appropriate funding regimes. The current rules on European funding (ESF/ERDF/SRB etc) have attached deliverables, which are not related to effective support (i.e. are quantitative not qualitative). The new HEFCE /RAE funding models must address this serious issue.

D) The barriers are many and often relevant on a 'case by case' basis. The identification of a range of case studies, of effective and ineffective support, would be helpful. There is often a barrier related to timescale, responsiveness and development of suitable metrics to articulate needs.

E) IP is often used as an excuse or problem but should not be an issue. There are many examples of best practice that can be drawn down and a variety of possible models.

3 Skills and Education

A) Career paths will need to coalesce and the exchange of people between business and Universities will enable innovative individuals to develop satisfying careers without the need to make early choices, which stifle technology transfer. Industrialists are often reluctant to enter academia due to poor pay and reward structures. Academics are often risk-averse. However, a range of creative possibilities exist, from developing foundation degrees and progression to Industry sponsored Chairs. Frequently the barriers are operational or financial and funds should be developed to encourage mobility.

B) Unless strategic plans are in place business will source the talent it needs and will be flexible in attracting the right people. Where there are areas of National /International skills shortage the Universities will position themselves to fill this gap; the issue is where the numbers are small and the universities are looking for viable numbers or where a research programme requires costly infrastructure. Sector skills agencies, employer for a, HEFCE, LSC's and business organisations should inform this. National prioritisation in the University sector with portfolio swapping will be necessary to identify areas of overprovision and skills shortages. Independent centres of excellence with an industry focus could facilitate this dialogue. The professional bodies need to be proactive in this respect

4 Financial Considerations

A) The White paper should be implemented to allow Universities to evidence a positive contribution to third leg activity but the metrics must first be developed; this is a difficult area where much work needs to be done. The data collected to date shows a progressively more strategic and embedded approach by HEI's to HE-business interactions.

B) R&D tax credits are helpful but other financial models might be more appropriate. It is unlikely that tax incentives will influence innovative outputs from research skills.

A case history/ example of best practice:

Teesside Food Technology Transfer centre.

As a senior academic manager (formerly Dean of School of Science and Technology) with a broad background in industry and considerable expertise in food manufacturing and research, I established the Teesside Food technology Centre. I am an international expert on food regulatory issues (Chair of Government Advisory Committee on Novel Foods and Processes), member of EPSRC Council 1999-2003, Food Chain and Crops for Industry Foresight Team etc. I am also extremely active with the RDA in developing the regional sectoral support strategy and a member of the Regional Science and Industry Council (section 1 above).

As the regional cluster strategy developed, I recognised the need and the evidenced the availability of expertise to develop a regional centre to support the food sector. This was funded and launched, as the Teesside Food Technology Transfer Centre (FTTC), in 1999. It has since received ESF/ERDF funding and generates approx 33% private sector income. With 8 staff and a range of accredited consultants it responds to a wide range of enquiries and delivers accredited training in the region, nationally and abroad. It was recently awarded a tranche of DEFRA funding, and to date, is the only centre (there is now a national network of 5 centres) to be given repeat funding.

It also informed the regional food and drink sectoral support strategy and is responsible for delivery of 13 of the 17 strands of industry support therein. It has developed 4 teaching Company Schemes, worked with academics to develop MSc modules and other accredited HE short courses. However, it is actively engaged in sub-degree provision and does not recognise breaks in the continuum of industry skills needs - delivering appropriate activity at all levels but not replicating provision available elsewhere. It is led by an active industry board, which is chaired by an eminent former MD from the sector.

To enable further expansion the food centre has moved from University premises to independent commercial business facilities and is co-located with EPICC.

Research activity does not feature prominently in the regional food sector companies; (the 45,000 employees in the regional food manufacturing companies are mainly semi-skilled operatives with only 10% technologists) but I am actively engaged in Framework 6 activity both in my own right as a scientist and as the Chair of the regional facilitation committee.

The food centre is now successful and I recognise with acute clarity the need to constantly redefine regional strategy for example, in the light of the delivery of outputs from the Curry report and to take a regional 'Farm to Fork' approach. I am also acutely aware of the need for a less fragmented approach and see the acute need for a northern approach to food sector support embracing One North East, North West RDA and Yorkshire Forward and the wide range of Universities embraced in these 3 areas. All 3 RDA's have informally expressed the desire to discuss this but my dilemma is that I have objectives to meet that do not permit the flexibility of time of resources to engage in these issues personally - I am still on a University contract with a time-limited secondment. **Great skill and diplomacy has been required to reconcile Industry needs and University objectives** which have been focussed on increased student numbers

Many example of commercial success can be quoted; for example:

.... a small Teesside company that in 1999 was a small coffee shop that made sandwiches for its own internal use is now a business employing 170 people with a turnover of £10.4 million producing 70,000 sandwiches daily. It is about to expand into a £1.25 million factory expansion and increase production by 25%. The Food Technology Centre has sourced funding and premises, advised on design and equipping the production facility, introduced appropriate controls such as waterless cleaning, sourced and trained staff and provided specialist daily trouble shooting, especially in the early days of business, before in- house expertise could be employed.

There are many other success stories that can be supplied upon request.

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SUMMARY

- * Business Academic collaboration is essential for prosperity
- * Metrics must be developed to determine success
- * Many small agencies are already engaged and there are too many initiatives which need to be rationalised allow business to access effective support
- * Universities need to recognise and reward a new breed or entrepreneurial academic/industrialist mobility across the interfaces is essential

There are many examples of good practice but the implementation of the White paper will need a 'joined up' approach from National Government including many sections within DTI and also from HEFCE/DfeS/research Councils/Sector Skills Councils and outcomes from the Roberts research review must also be consistent. Metrics for success and funding is core, to ensure that the Universities develop strategies and implementation routes, to deliver appropriate business support.

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**Prof J M Bainbridge OBE
CEO EPICC,
Cleveland Business Cenmtre
WatsonStreet
MIDDLESBROUGH
TS1 2RQ**

++441642 499100 (sec)

++441642 499103 (dir)

07802 678246 (mob)

j.m.bainbridge@tees.ac.uk

