

Annex A The survey questionnaire

Higher Education Funding Council for England
Scottish Higher Education Funding Council
Higher Education Funding Council for Wales
Department for Employment and Learning, Northern Ireland



Higher Education-Business Interaction Survey 1999-2000

This survey is carried out on behalf of the Higher Education Funding Councils by
Centre for Urban and Regional Development Studies
University of Newcastle upon Tyne

Purpose of the survey

This questionnaire has been designed to meet the needs of a wide-ranging group of stakeholders with interests in promoting HE-business interaction. The survey has four main objectives:

- To update previous surveys of HE-business interactions, and capture the key outputs of such interactions, taking into account differing institutional missions, strategies, capacities and expertise,
- To quantify a UK baseline to substantiate the significant level of activity which has developed in HEIs and from which improvements in later years could be measured,
- To establish and test the robustness of selected indicators which might later be deployed to inform decisions on further targeted funding for knowledge transfer activities,
- To assess the opportunity costs of the possible annual survey against the value and utility of the data collected.

The questionnaire includes a combination of quantitative and qualitative questions addressing the interactions of the HEI with business and business support activities. Some

data will be obtained direct from the Higher Education Statistics Agency (such as total research income) and any questions that ask for related indicators are asked in ways that do not conflict with HESA data categories. It is anticipated that some of the quantitative data may in future be collected by HESA, and hence responses to these questions should be made with all the rigour normally expected of HESA annual returns. These include questions relating to income, patents and spin off companies. Other questions focus more on policy and may require a value judgement. It is recommended that the responses to these are discussed within the relevant unit rather than be completed by a single individual. It is expected that different units or departments may need to be consulted in order to complete all of the questions, and so the questionnaire is designed to be split up for completion, although it must be re-assembled into a single response before return.

General instructions

The questionnaire is intended to provide data for the academic year 1999-2000, and annualised quantitative data is all requested for that year, and in some cases the previous year also. Please note that the questionnaire is also seeking to establish a baseline situation in advance of the implementation of new outreach programme expenditures in the

academic year 2000-2001 (such as HEROBC, or the Welsh Centres of Expertise) and therefore the situation during 1999-2000 should be taken as the present for the purposes of the questionnaire.

Responses should be made for the whole institution, although where a merger has not been fully integrated (especially where the two institutions are in different regions) then separate responses can be made. In such cases a note should be added on the coverage of the response.

Please do not leave any question blank. If the answer to a question is zero or negligible then please enter "0". If data are not available then enter "n.d." or if not applicable then "n.a.". If a

figure is an estimate then please write "e" alongside it.

Confidentiality

The completed questionnaires will be coded and used for analysis by CURDS and the aggregate results published by HEFCE on behalf of all of the Funding Councils. No individual HEI responses will be published, except by prior permission in exceptional cases. Data will not be released in any way that permits ranking of institutions. The data set will be the property of the Funding Councils on completion of the analysis, and may be used in future years to monitor changes at the level of the sector as a whole and for individual institutions.

Response Contact

Institution and coverage

Contact name

Job Title

Full postal address

.....

.....

Telephone

Fax

Email

Please return by March 31st to:

Cheryl Conway
Centre for Urban and Regional Development Studies
University of Newcastle
Newcastle upon Tyne
NE1 7RU

If you have any questions about this questionnaire then please contact any of the following:

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This questionnaire is available as a Word file, at <http://www.ncl.ac.uk/unireg/hefce/hefce.htm>

A. Institutional strategy and economic development

A1. In what areas do you see the HEI as whole making the greatest contribution to economic development (please tick all those appropriate and indicate which are the top three)?

	Appropriate	Top three
• Access to education	<input type="checkbox"/>	<input type="checkbox"/>
• Graduate retention in local region	<input type="checkbox"/>	<input type="checkbox"/>
• Technology transfer	<input type="checkbox"/>	<input type="checkbox"/>
• Supporting SMEs	<input type="checkbox"/>	<input type="checkbox"/>
• Attracting inward investment to region	<input type="checkbox"/>	<input type="checkbox"/>
• Research collaboration with industry	<input type="checkbox"/>	<input type="checkbox"/>
• Strategic analysis of regional economy	<input type="checkbox"/>	<input type="checkbox"/>
• Attracting non-local students to the region	<input type="checkbox"/>	<input type="checkbox"/>
• Support for community development	<input type="checkbox"/>	<input type="checkbox"/>
• Developing local partnerships	<input type="checkbox"/>	<input type="checkbox"/>
• Management development	<input type="checkbox"/>	<input type="checkbox"/>
• Meeting regional skills needs	<input type="checkbox"/>	<input type="checkbox"/>
• Meeting national skills needs	<input type="checkbox"/>	<input type="checkbox"/>

A2. Does the HEI have a strategic plan for business support? Please indicate on a scale from 1-5 which of the following statements most closely accords with your state of implementation in 1999-2000. (E.g. if between the first and middle statement the answer is 2. Record the score in the box below the table)

1	2	3	4	5
No strategic plan in place. Ad hoc approach to business support		Strategic plan developed and only partially implemented, or restricted to certain departments or central functions only		Strategic plan developed as a result of an inclusive process across the whole HEI. Accepted across almost all units and recommendations implemented. Use of plan to set targets and monitor achievement.

A3. Does the HEI set out to work more closely with particular business sectors or clusters such as aerospace, agriculture or biotechnology? If so please list priority sectors (highest priority first).

A4. If you answered question A3, please indicate how these priority sectors were determined (tick all boxes that apply).

- The HEI is a specialist institution focused on sector specific areas
- The HEI took its cue from priorities in RDA regional strategies
- Response to demand from companies in these sectors
- The HEI identified important business clusters in its region
- These sectors had best fit with the institution's expertise
- The HEI focused on a 'gap in the market' left by other HEIs
- Other (please specify)

A5. Is the HEI involved in the development and implementation of regional skills strategies in terms of the provision of expertise and data and the involvement of senior HE staff in regional partnerships? Again please indicate on a scale from 1-5 which of the following statements is appropriate for 1999-2000.

1	2	3	4	5
Passive response to skills strategies. No involvement in steering committees, no provision of data or expertise. No attempt to influence or respond to strategy during consultation.		Some engagement with regional partners and provision of expertise and data, but approached as a narrow sectoral interest. Involvement from officers with defined role rather than leadership inputs.		Pro-active engagement providing expertise data, interpretation and leadership inputs. HEI seen as a core asset in the region and becomes a central element within the strategy

A6. Is there business representation on your governing body?

Number of members on governing body	
Number that are from business	

A7. In the context of your overall institutional mission, what importance would you attach to the economic development of your region?

- High priority
- Medium priority
- Low priority

A8. Which of the following regional/local units is of greatest priority in your university's institutional mission?

- Regional/local area not of any significance to mission
- RDA area (ie East Midlands, South West)
- Local authority area (county or unitary)
- Locality – city or town
- Area defined by the University (e.g. surrounding counties especially if crosses regional boundaries or is multi-county)

Please provide a written description of what you consider to be your local region as indicated above. If this is specified in your institutional plan or other formal documentation then please provide this definition.

A9. How would you rate the level of incentives for your staff to engage with industry and commerce? (Please grade your institution on the following scale from 1-5 for the situation during 1999-2000)

1	2	3	4	5
Barriers outweigh any incentives offered. General corporate culture is focused on internal activities and narrow interpretation of teaching and research. Collaboration with industry seen by staff as detrimental to career progression.		Some incentives in place, but with some barriers remaining. Typically policy may be generally supportive but there is a lack of understanding across the institution. Promotions committees still take a narrow focus on research even though guidance suggests industrial collaboration is valued equally.		Strong positive signals given to all staff to encourage appropriate levels of industrial collaboration. Incentive procedures well established and clearly understood and applied.

B. Collaborative research with business

B1. What was the HEI's income from public sector funded collaborative research grants involving business co-funding or formal collaboration? *(NB Please exclude income from any project that does not involve direct business participation in the form of part sponsorship or direct collaboration - e.g. mainstream response mode research council projects without business partners, or EU FP projects with no industrial partners)*

	1999-2000
Research councils	
OST	
EU Framework Programme	
Other	

B2. What was the HEI's income from contract R&D originating from partners located in the same region, within the UK and from outside the UK?

These contracts exclude responsive mode grants for research made by educational charitable bodies (such as the Wellcome Trust or Leverhulme Trust) and public agencies, but focus on studies and projects commissioned by the client body to underpin their own objectives.

The region is defined as the English RDA region, Scotland, Wales or Northern Ireland. National covers the whole UK, excluding that already reported under region. Contracts with Whitehall government departments should always be included as national, although contracts with devolved administrations or regional government offices should be included as regional unless the HEI is in different region. HEIs with substantial campuses in two regions should consider both regions as the home region, although if one campus is simply a teaching outpost lacking significant research generation activity then that region should be considered as outside the home region.

1999-2000	Regional	National	Non-UK	Total
Direct contracts with commercial organisations				
Direct contracts with private non-profit bodies				
Direct contracts with public sector bodies				

B3. Approximately what percentage of contracts with businesses by number and value during 1999/2000 were with SMEs (less than 250 employees and not part of bigger enterprise groupings)

% contracts by number	% contracts by value

B4. How many CASE awards did the HEI hold (number of students funded) and for how many was the partner within the same region.

	1999-2000
Total number of CASE awards	
Number with partners in the same region	

B5. What were the number of Teaching Company Programmes and Teaching Company Associates, and what proportion were with firms within the same region?

	1999-2000
Total Teaching Company Programmes	
Total Teaching Company Associates	
Teaching Company Programmes with regional partners	
Teaching Company Associates with regional partners	

B6. Does the HEI provide equipment-related services for industry, such as analysis, measurement and testing?

Yes No

What was the total income in 1999-2000 from the provision of such services - to regional firms, UK wide and foreign? How many firms are involved at each scale?

	Regional firms	UK wide	Foreign	Total
Income 1999-2000				
Numbers of firms involved				

C. Intellectual Property

C1. Do you monitor the number of invention disclosures made each year?

Yes No

C2. If yes, how many disclosures have been made in each of the last two years?

1998-99		1999-2000	
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C3. Does the HEI exert ownership over intellectual property by filing patents?

Yes, patents filed by the HEI in-house
 Yes, patents filed on behalf of the HEI by another organisation
 No action taken

C4. How many patents have been filed by or on behalf of the HEI in each of the last two years? (NB Count as one patent either a UK patent or a European patent, but do not count multiple filings of the same patent in different countries)

	1998-99	1999-2000
Number of total UK patents filed		
Number of new UK patents filed		
Number of UK patents granted		

C5. Does the HEI have an in-house capability to seek out licensing opportunities for its IP, or does it use an external agency? (please indicate the principal method only)

Yes, in-house capability
 Yes, external agency
 No action taken

C6. How many licences/options have been executed on the basis of HEI-owned intellectual property over the last two years? (excluding software and biological material end user licences under £1000)

Non-software licences	1998-99	1999-2000
Licences granted to UK based companies		
Licences granted to companies based overseas		

Software licences only	1998-99	1999-2000
Licences granted to UK based companies		
Licences granted to companies based overseas		

C7. What have been the total revenues from IP (including royalties on patents, copyrights etc but excluding software and biological material end user licences under £1000)

1998-99		1999-2000	
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C8. What were the total costs of IP protection activities? (including specialist staff, consultancies, patent costs and legal fees)

1998-99		1999-2000	
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C9. Is there a requirement within the HEI to report the creation of the following types of intellectual property

	Always	Usually	Rarely/Never
Inventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computer software or databases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Literary or artistic works	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Educational software and multimedia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial designs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trademarks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integrated circuit topographies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New plant or animal varieties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C10. How are intellectual property management activities usually initiated in cases of new intellectual property?

- The discoverer/researcher reports the discovery to the institution and requests consideration for protection and/or commercialisation
- The institution monitors the activities of the researchers and notes which discoveries should be considered for protection and/or commercialisation
- Other (please specify)

C11. Are individuals rewarded by the institution for their intellectual property?

Yes No

If so, what percentage of net revenues is given to inventors if cumulative income exceeds £100,000? (please explain policy briefly)

C12. Please append any policies in effect that influence the management of intellectual property.

D. Consulting activities

D1. Does the HEI have a central dedicated unit which provides the following:

- An enquiry point for SMEs
- Assistance to SMEs in specifying their needs
- A required contracting system for all staff-business consulting activities
- Indemnity insurance for staff

D2. How many firms have been assisted through consulting activities and what percentage have been based in the region?

	1998-99	1999-2000
Number of firms assisted through consulting activities		
Percentage based in the region		

D3. What has been the total income from consulting handled through formal HEI channels (includes individual payments direct to staff where known)?

1998-99		1999-2000	

D4. Does the HEI have a commercialisation company or department to manage consulting links and other external interactions?

- No Yes, exploitation company Date established
- Yes, internal department

D5. How many staff are employed in commercialisation and industrial liaison offices? (full time equivalents)

E. Spin off firms

‘Spin offs’ are enterprises, in which an HEI or HEI employee(s) possesses equity stakes, which have been created by the HEI or its employees to enable the commercial exploitation of knowledge arising from academic research. Other ‘start-up’ companies may be formed by HEI staff or students without the direct application of HEI-owned intellectual property.

Four types of spin off or start up firms can be defined:

- ◆ Spin off companies established using HEI intellectual property and in which there is some element of HEI ownership
- ◆ Spin off companies into which the HEI has assigned or licensed IP, but in which it has no equity
- ◆ Start-up companies involving current or former university staff as founders where the university has no ownership nor an IP agreement (in this case the HEI staff must be connected to the HEI immediately prior to formation of the company)
- ◆ Graduate start-up companies that have originated through the direct involvement off the HEI or through a dedicated graduate start-up programme.

E1. In the following table please insert the required information concerning each of these groups of firms.

	Number established 1999-2000	Number established in previous five years (1994-95 to 1998-99)	Estimated current employment of firms in columns A and B together	Estimated current turnover of firms in columns A and B together	Estimated equity value of firms in columns A and B together
Spin offs with some HEI ownership					
Formal spin offs, not HEI-owned					
Staff start ups					
Graduate start ups					

E2. For the case of companies part owned by the HEI, please provide an estimation of the total equity value of the portfolio? (including companies established before 1994 if relevant). Please provide only the HEI owned share of equity value.

£

E3. What has been the income to the HEI from the sale of shares in spin off companies during 1999-2000?

£

E3. Does the HEI provide support for spin offs through the following mechanisms, either provided by the HEI or in collaboration with a partner organisation? (You may tick both column one and two if appropriate)

	HEI provided	Partner provided	None
• On campus incubators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Other incubators in the locality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Science park accommodation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Entrepreneurship training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Seed corn investment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Venture capital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Business advice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

F. Training and personnel links

F1. To what extent does the HEI monitor skills needs and sectoral change through labour market intelligence (LMI), and take this into account in planning provision? (Please grade your institution on the following scale from 1-5 for 1999-2000)

1	2	3	4	5
No monitoring of skills, general use of LMI, or collaboration with employers		Moderate responsiveness – some changes in provision based on forecasting of demand using LMI, but little ongoing dialogue with employers and other bodies. LMI would typically be examined in central service units but not disseminated and used in departments.		Sophisticated monitoring systems at HEI level, with provision of appropriate data to individual departments. Evidence that information from LMI and employer suggestions are acted upon at central and departmental levels.

F2. To what extent do individual courses actively involve employers in the development of content and regular reviewing of the curriculum? (Please grade your institution on the following scale from 1-5 for 1999-2000)

1	2	3	4	5
No links with employers in development of locally oriented courses or overall shaping of the curriculum		Some dialogue with employers and other bodies about the nature of courses, but limited e.g. to specific vocational areas, or one-off exercises.		All departments regularly consult with employers and other partners on curriculum where relevant. Specialist subjects are kept up to date and relevant to the labour market. More generic skills developed in all courses as required.

F3. How many undergraduates undertake placements in business?

Type of placement	Numbers of students involved 1999-2000	% of participants which find work with these employers after graduation
1 year sandwich placements		
Shorter placements required for course		
Optional placements organised by the HEI		
Other		
Total		

F4. How are these placements organised? (Please tick all that apply).

- Via a central placement department
- Individual school or department level
- Via careers service
- Via students union
- Ad hoc between students and businesses
- Via external intermediary organisation (please specify)

F5. Does your institution run courses that were specifically designed to meet the needs of a particular firm or group of firms?

	Yes	Numbers of students 1999-2000
Undergraduate degree modules	<input type="checkbox"/>	
Undergraduate degree	<input type="checkbox"/>	
Masters degree	<input type="checkbox"/>	
Diploma	<input type="checkbox"/>	
Non-accredited course	<input type="checkbox"/>	

F6. Does your institution provide the following?

- Distance learning for businesses
- Continuous work-based learning
- Short bespoke courses for business on campus
- Short bespoke courses at companies' premises

F7. What was the revenue for 1999-2000 from the provision of continuing education and training to companies?

£

G. Regeneration activity

G1. Has the HEI received funding from any of the following programmes in the last 2 years?

- European Regional Development Fund
(Objective 1 or 2 areas, Regional Challenge)
- EU Community Initiatives
(i.e. ERDF/ESF thematic programmes such as RECHAR, RETEX, KONVER, ADAPT, HORIZON)
- European Social Fund
- Single Regeneration Budget
- City Challenge
- DfEE Higher Education Regional Development Fund/
Skills Development Fund
- Other local economic development programmes
(Please provide names of programmes)

G2. What was your income from various regeneration and regional development programmes in 1999-2000?

ERDF income (revenue projects)

Innovation support activities	
General business support activities	
Community support	
Other	

ERDF income (capital)

Innovation support activities	
General business support activities	
Community support	
Other	

ESF income

Direct support to business	
Support to individuals	

Single Regeneration Budget and related central government regeneration programmes

Revenue	
Capital	

Other regeneration grants and income from local and regional bodies

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G3. What role do these programmes play for the HEI? *(Please tick all those that are appropriate and the three most important roles)*

- | | Appropriate | Top three |
|---|--------------------------|--------------------------|
| • Additional funds for teaching, training | <input type="checkbox"/> | <input type="checkbox"/> |
| • Additional funds for research | <input type="checkbox"/> | <input type="checkbox"/> |
| • Enabling capital projects - new building/
accommodation | <input type="checkbox"/> | <input type="checkbox"/> |
| • Acquiring research equipment (used also by industry) | <input type="checkbox"/> | <input type="checkbox"/> |
| • Building strategic links with local industry | <input type="checkbox"/> | <input type="checkbox"/> |
| • Fulfilling regional mission through new
services to industry | <input type="checkbox"/> | <input type="checkbox"/> |
| • Facilitating partnerships | <input type="checkbox"/> | <input type="checkbox"/> |
| • Enhancing knowledge of labour market needs | <input type="checkbox"/> | <input type="checkbox"/> |
| • Enhancing redesign of curriculum | <input type="checkbox"/> | <input type="checkbox"/> |
| • Facilitating community development | <input type="checkbox"/> | <input type="checkbox"/> |
| • Other (please specify) | <input type="checkbox"/> | <input type="checkbox"/> |

G4. Have you experienced any specific problems in these programmes? *(Please tick all those reasons that apply)*

- | | |
|---|--------------------------|
| • Administrative burdens | <input type="checkbox"/> |
| • Matching funds requirements | <input type="checkbox"/> |
| • Timing of bidding process | <input type="checkbox"/> |
| • Difficulties of partnership management | <input type="checkbox"/> |
| • Inadequate funding rates | <input type="checkbox"/> |
| • Eligibility rules | <input type="checkbox"/> |
| • Co-ordination problems internal to the university | <input type="checkbox"/> |
| • Other <i>(please specify)</i> | <input type="checkbox"/> |

G5. Which of the following statements best describes your partnership arrangements with local and regional bodies? *(Please grade your institution on the following scale from 1-5)*

1	2	3	4	5
No engagement with community regeneration schemes, apart from individual efforts.		Some representation of the HEI on local partnerships at senior management level, but with limited implementation capability. Main focus is on research role and possible property development role.		Active and creative engagement with community programmes, with the HEI taking a leadership position and applying a wide variety of resources. Community regeneration seen as a mainstream activity with role for access policy, link to student community action and staff involvement as part of staff development.

H. Questionnaire administrative information

H1. Approximately how much time was spent in completing this questionnaire, and what do you estimate was the cost to your institution?

H2. Were any of the questions impossible to answer due to the unavailability of data? (if so, which ones and why?)

H3. Were any of the questions difficult to answer without an excessive degree of additional analysis? (If so, which ones and why?)

H4. Which format of questionnaire and reply format would be most useful to you? (Paper form, Word document, Excel sheet, Webform, Postal return, Disk return, Email return)

Please return the completed questionnaire to CURDS, University of Newcastle,
Newcastle upon Tyne, NE1 7RU