

Business and Higher Education – Promoting effective collaboration

Successful relationships between business and higher education can be a source of innovation, specialist skills, world class research and development and increased productivity. This paper examines the current state of play on collaboration. It draws on:

- a snapshot survey in February/March of the CBI's 200 largest members, which between them employ approximately 3 million people, asking about their links with higher education. The response rate was 25% (50 companies)
- nine regional consultations with CBI members in England on their higher skill requirements and CBI seminars in the context of the DTI's Innovation Review.

The essential finding is that while there is a great deal of worthwhile activity, there is plenty of room for improvement:

- links with universities are extensive and vary greatly
- the main business benefit is access to world class research and thinking, and potential recruits
- poor customer service is the main barrier to effective collaboration.

Links with universities are extensive and vary greatly

The vast majority (84%) of companies who responded to the survey have some links with universities. Even within this small sample, the nature of contacts varies greatly, depending on the particular needs of the business. Most contacts (74%) are UK-wide but 48% of respondents have links with universities or higher education institutions in their region. Members also reported links with a mix of pre-1992 and post-1992 universities.

Scale - the number of links varied considerably. While the median number of contact universities was four, some companies had links with over 50 different institutions. A minority of respondents (16%) do not have any links with any higher education institutions.

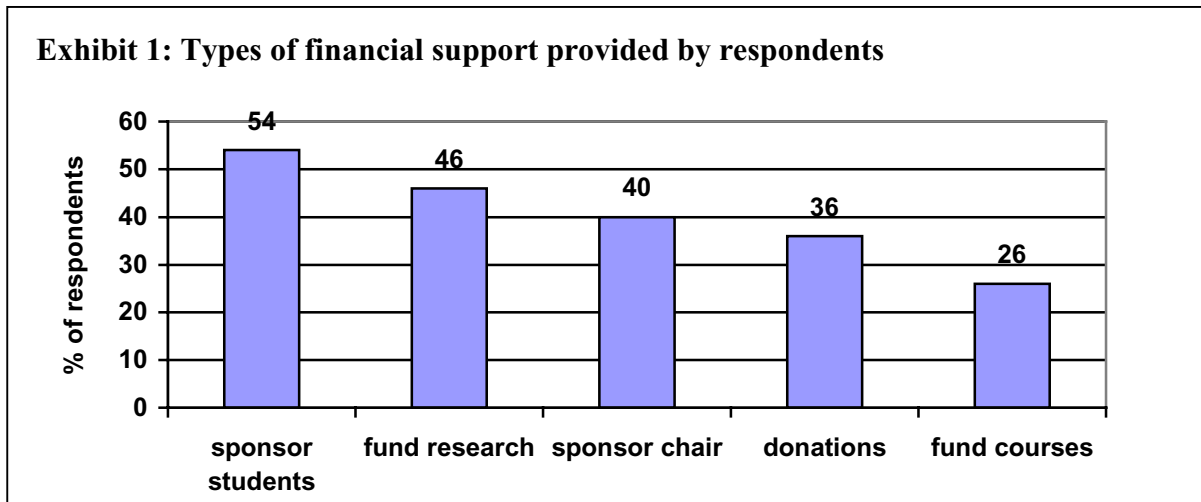
Overseas links – Almost half (44%) of respondents had links with universities or HEIs overseas. These contacts covered a very wide range of institutions and countries including France, the United States, Germany, Australia, Holland, Spain, the Czech Republic, India and Sweden.

Subject - links between business and higher education covered many subject areas. Members reported well-developed relationships in the material sciences, engineering and chemical fields. But collaboration with higher education is not limited to science and technology. There were also links with higher education institutions in fields as diverse as new media, entrepreneurship, management, food, law, tourism, transport logistics, retail operations, risk, psychology and stress management.

The high level of involvement among the respondents reflects the fact that they include some of the largest companies in the UK. The wider CBI Innovation Survey, which looked at 356 companies in 2001, found that only 35% worked with UK universities. Our recent snapshot survey is clearly not representative of businesses across the board, but it does highlight some of the benefits and problems firms have encountered when working with the HE sector.

Employers have invested time and money in effective collaboration

Finance - seventy-two percent of respondents already provide financial support to universities (Exhibit 1). Several firms provided all the types of support listed below:



Course development - the majority (70%) of respondents are already involved in developing courses with universities. Such involvement includes for example design and joint supervision of PhD project work, advising on course content and providing additional lectures. The responses showed:

- more than half (52%) help to develop undergraduate courses
- almost half (48%) help to develop Masters / PhD courses
- a third (32%) were involved in developing other courses not leading to qualifications
- less than a third (28%) of respondents are involved either regularly or occasionally in the design of sub-degree courses
- 30% had no form of involvement in course development.

In 2000-01 businesses spent just under £150 million on courses provided by UK HE institutions¹. This was up 25% on the previous year but still represents a fraction of employers' total spend on developing staff (£23.5bn in 2000).

The main business benefit is access to world class research and thinking, and potential recruits

All the survey respondents who had links with higher education cited real benefits to their business. This echoed comments at the Innovation Seminars that, 'links with universities are created and maintained for business reasons.' The most significant benefits were the opportunities to access research expertise and to improve the quality and business awareness of young people (Exhibit 2).

¹ Data from HE – business interaction survey 2000-01 (Higher Education Funding Council for England)

Exhibit 2: Based on your experience of working with higher education institutions, what are the three most significant benefits which collaboration has brought to your company? (% of respondents)

Quality and intellectual ability of researchers	52%
Prepare job seekers, improve quality of graduates	46%
Networking	18%
Staff training	18%
Increase brand awareness	18%
Relevance of courses to company requirements	16%
Good relationships	8%

Intellectual ability - the most common benefit of links, mentioned by more than half of respondents, was access to the high quality intellectual input, leading edge knowledge and advice. Many businesses benefit from the new ideas, creative thinking, an ‘external eye’ and scientific research feedback on key business issues that collaborations with universities can offer.

‘The access to research and development expertise and latest ideas are a significant benefit. Also, there is independent and rigorous assessment and peer review which means that any findings are credible’ (utilities company)

Recruitment - almost half of respondents (46%) said that their links with higher education helped to develop young people and potential future employees with the right skills and business awareness. Other respondents to the survey used links to increase young people’s awareness of the company and job opportunities (18%), and to influence the content of courses to reflect the knowledge and skills needed for those jobs (16%).

Networking - links can be useful for developing networks with tutors, researchers, other businesses and students, as mentioned by one in six respondents (18%).

Staff training - one in six used universities’ expertise to improve the skills of existing employees through management, professional or executive training programmes (18%).

Poor customer service is the main barrier to effective collaboration

The snapshot survey shows that many very large companies with significant resources to devote to links experience difficulties (Exhibit 3). These difficulties are likely to be even greater for smaller and medium sized companies:

Exhibit 3: Based on your experience of working with higher education institutions, what are the three most significant problems which you have encountered? (% of respondents)

Managing the relationship, customer service, timescales, deadlines	50%
Low quality students, lack of business awareness	24%
Relevance of course content	14%
IPR issues	14%
Poor quality careers advisers	10%
Maths and science ‘drift’	8%
Short-term funding	8%

Relationship - Half of the respondents had difficulties managing the relationship, particularly if one person in the university or the business moves on. Customer service is often patchy, and businesses reported unhelpful attitudes towards timescales and deadline management.

'There's a lack of understanding of how to relate to industry, and the academic approach is slower than in the commercial arena.' (legal company)

A vital element of customer service is communication. This is a particular issue for small and medium-sized firms: finding the right universities to link with in the first place and then finding the right people within these universities. Creating useful networks is both time-consuming and expensive for the company. Indeed, at the recent CBI Innovation Seminars, universities were described as being 'unapproachable to the average small company'.

'It's very difficult to find the right person to talk to. In the end we found them, but that was pure coincidence!' (motor manufacturer)

Research by the Higher Education Funding Council for England (HEFCE) also suggests that there is room for improved customer service. University staff generally perceived that there are 'some incentives to engage with business, but some barriers remain. Policy is generally supportive but there is a lack of understanding across the institution.' Many individuals and departments within universities are committed to joint research projects with business, but the need to secure research and teaching funding based on academic criteria can take precedence over this commitment.

Quality of students - about a quarter of respondents found it difficult to attract young people of the right quality. In some cases this was due to low business awareness and lack of knowledge of different careers. Respondents felt that some students and academics had prejudiced views of certain types of industry, such as retail, hospitality, transport and energy. There were also more fundamental questions raised about the ability of students. This reinforces feedback from CBI regional councils that the quality of graduates is too variable.

'There's general ignorance amongst the undergraduate population of the career benefits and opportunities in our industry. Students are very passive in their approach, which does not really fit in with the current economic environment.' (electronics company)

Courses - one in seven said that course content needs to become more relevant to business. This can be a disincentive towards businesses getting involved in developing courses.

'Universities need to demonstrate flexibility, adaptability and responsiveness. Where courses are regularly refreshed by research involvement, they are more relevant to our business needs.' (engineering company)

Intellectual Property Rights - one in seven respondents said that universities' attitudes to IPR are hardening. Expectations about IPR on both sides need to be carefully managed. The vast majority of the costs of a product during its life cycle are through sales, marketing and product development – R&D typically represent just 1% of the total costs of a product.

Suggestions for improving collaboration:

Quality of graduates

Government could explore ways to increase the quantity and quality of work placements for both academics and young people, in order to improve the quality of graduates and particularly their business awareness. It could build on what is already working well, such as the Shell Technology and Enterprise Programme (STEP). Business people have a role to play to help improve entrepreneurship, for example by offering placements giving lectures and running seminars.

Attitude to business

One way to encourage researchers to tailor projects to business needs would be to include the criteria of ‘business impact of research’ in the Research Assessment Exercise and in whatever assessment tool replaces the RAE. In the meantime, the process of concentrating research funds in fewer universities by awarding 6* ratings should include new criteria that rate the business and economic impact of research departments, as well as their academic excellence. The extra funding awarded using this criteria should be available to all research departments currently rated 4 or above.

Better communication

A national database of ‘interaction opportunities’ would enable more businesses to be aware of potential projects, skills and facilities available in the HE sector that might meet their needs. If this database were easily accessible and contained all the essential information that businesses need, then it would decrease the element of chance that many businesses experience in seeking the right partner. For example, the database ought to be able to identify centres of research excellence in a particular field across the UK, along with a listing of current publicly-funded projects in the individual research groups, plus details of staff capabilities and supporting infrastructure for collaborative research.

Relevant courses

Some universities are clearly seeking to respond to business’ requirements for tailored courses. Research by HEFCE shows that in 2000-01, 73% provided short bespoke courses for business on campus and 64% did so on companies’ premises. But it is not clear how many businesses are offered this level of customer service. Even within the sample of larger companies we surveyed, 40% said they would be willing to get involved if universities were more prepared to develop well-defined, bespoke courses that add value to the business.

**Human Resources Directorate
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