Knowledge Transfer from Higher Education

Identifying Excellence

This paper was developed with the help of some of our member companies, in particular of the following:

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General Background

CIHE considers that in an age of global competition, the competitiveness of the UK requires excellence in all organisations. In a knowledge age it also requires the continuous development, dissemination and application of knowledge. Higher education institutions (HEIs) have a key role to play in these different but overlapping functions as they are in the knowledge business. Equally, we consider that it is only through a sustained partnership between businesses, education providers and learners that international competitiveness and excellence in the knowledge business can be developed and sustained.

Funding can reinforce these objectives and higher education institutions are greatly influenced by the funding regime. A new approach to funding is needed that offers:

- Increased autonomy to higher education institutions
- Associated accountability but with less micro-management
- Support for excellence

All three could be satisfied if there was a move to block funding in support of institutional missions supported by a greater use of institution derived output measures. It is against this general background that this paper considers appropriate output measures to help define and identify excellence in knowledge transfer.

Three other introductory points are worth making. The focus on output measures reflects a desire by the Government to encourage HEIs to be more market oriented and demonstrate accountability. We appreciate and support that thrust. However, our companies also note that such a focus does not reflect current leading business practice where a balance of input and output measures is used. Managing organisational capability requires identifying relevant measures that predispose an organisation to outstanding performance.

Equally, an excess of measures can hinder rather than help achieve the international excellence that is the prime objective. Looking at the big scientific, engineering and technical challenges the UK faces and considering broad

milestones and indicators of progress should complement more detailed analysis. Academics need to be freed from micro-management if they are to be innovative. Generally this involves building trust supported by monitoring that is light-touch.

Finally, we should remember that each HEI activity or initiative should have full costs associated with it so that rational decisions can be taken by institutions on the activities that should be pursued in support of their institutional mission.

Research Output Measures.

In the area of research, output measures can be considered under two broad headings:

- The creation of new knowledge via fundamental research; there appears to be no collective will to depart from the Research Assessment Exercise (RAE) though agreement that certain aspects could be improved;
- Knowledge transfer which impacts particularly on the regional/local economy; here there are no agreed measures of excellence.

There is a particular need to disentangle excellence in the transfer of knowledge from mediocrity in fundamental research. The current RAE is not able to make that distinction when departments are classified as 3 or 3 *.

Measures for Knowledge Transfer

We suggest that the criteria most relevant for assessing excellence in knowledge transfer are:

- the flow of people trained in research who secure graduate level jobs in the UK; leakage outside the UK or employment in jobs where graduate skills are not required or deployed - as viewed by the graduates - would not be relevant;
- the flow of other graduates equipped with relevant subject knowledge, high-level key/transferable skills and knowledge of the world of work (eg via a quality work experience programme) so that they can make an early contribution to the effectiveness of organsiations; knowledge transfer is effected by people transfer who add value through brainpower in a variety of ways not just via the transfer of subject specific knowledge;
- the number of formalised networks a department is engaged in; strong innovative departments are those that are receptors and synthesisers of knowledge via their involvement in networks; external value-added can thereby be captured and made available more generally;
- the amount of funding captured from the private and charitable sectors; if external organisations are willing to invest in the unit or a specific project then that is one indication of its perceived market worth;
- the views of local companies on the department, how far it appears in the eyes of actual and potential customers to be in tune with their needs, responds to and meets their requirements and is embedded in local networks; the organisations will also have views on the effectiveness of the graduates and post graduates produced and on their ability to transfer and generate ideas that help transform their businesses;

- the views of graduates on how far they felt they were equipped to add value early in their careers or enabled to establish their own business.

Other criteria would cover:

- The number of graduates starting a business, especially where that business contributes to wealth creation;
- The number of spin-off/start up businesses with which academics or the institution/department are associated in one way or another;
- The number of TCS and LINK schemes in which a department is involved;
- Whether there is a Faraday or similar exchange organisation
- The number of patents, licenses and other evidence of exploitable research;
- The existence of science parks, incubator units and similar infrastructure for facilitating knowledge transfer or attracting entrepreneurial organisations (since academic/business associations have two way benefit flows);

- Whether the institution is a University Challenge winner or Science Enterprise centre;

(However, given the desire to avoid an excess of measures, we would place less emphasis on these latter criteria).

In a knowledge economy the dissemination and application of knowledge is as important as its creation. Funding incentives however currently reinforce a natural academic predilection for the latter. Greater parity of esteem and activity would be encouraged by funding streams which recognise and rewards excellence in these activities. This in turn requires agreement on appropriate indicators for identifying such excellence.

This paper has suggested some relevant criteria. They should help facilitate a wider move to funding and monitoring institutions on the basis of their declared and distinct missions. Such an approach would recognise, support and encourage diversity and excellence in all its various forms including in knowledge transfer.

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