

# Comments on the NISA Engagement and Impact Assessment Consultation Paper

### Introduction

The benefits arising from business/university collaboration were evident to the B/HERT founders in 1990. The intervening 26 years have been marked by massive shifts in economic drivers, technological disruption and the emergence of vastly different business models in all sectors. These shifts are driving industry transition towards a knowledge economy that must be innovation-led, on a global scale, and where competition and productivity rely most heavily on new age skills. Business innovation and sustainability are dependent on creative resources that include world class researchers and talented graduates coming out of our university system. Today, many university/business research partnerships are designed to realise maximum impact for wide application.

NISA clearly identifies universities as the engine room for national innovation. The initiatives in the Agenda address endemic problems that include -

- low levels of business/university collaboration;
- limited investment in research activities;
- poor innovation translation and commercialisation of research;
- an undersupply of STEM skilled graduates, particularly women.

NISA points to business and industry as the critical partners in tackling these ambitious and important challenges. Significant cultural change and sound judgements by all parties are necessary, however, for the NISA opportunities to be exploited. For example, business confidence must be high in working with universities to reap the innovation benefits. Partners must appreciate that through engagement, the inherent economic and social value of outputs that flow from high quality teaching and sophisticated research can be translated into products, processes and services.

As the first step in building an assessment tool on engagement, B/HERT supports the development of a database that identifies the full range of activities underway in universities and their relevance to the economy. This exercise will —

• provide individual universities with local benchmark data as well as a national database of teaching and research activity across universities;

- create a data source that can identify modern inter-disciplinary, collaborative activity that reaches beyond traditional teaching and research boundaries;
- allow data to be shaped into clusters for use in engagement and impact assessments;
- produce an assessment template that can be adapted for development of a comparable assessment tool for business and industry;
- generate information for use in a community education campaign profiling university activities and their contributions.

The Consultation Paper refers to the wealth of data collected for government reports that can be sourced in creating this new comprehensive database. Business and industry would welcome this centralised information resource.

### 5.2 Definitions and scope

1. What definition of 'engagement' should be used for the purpose of assessment?

There are many reasons for business and universities to engage. For example, The Dowling Review of Business-University Collaboration<sup>1</sup> illustrated the varied motivations by academics for engagement, all of which are relevant to innovation.



(Source: The Dowling Review of Business-University Research Collaborations, Figure 4, p14)

These are all important forms of engagement and part of the innovation agenda.

Professor Sir Tim Wilson in his review of UK business/university collaboration also defined engagement broadly as "an integral part of the skills and innovation supply chain to business".

The multi-dimensional nature of the supply chain is represented by a landscape of business-university collaboration, consisting of a number of highly diverse domains of activity. For example: the education of highly skilled graduates, applied research in advanced technologies, bespoke collaborative degree programmes, 'science' park developments, enterprise education, support for entrepreneurs, industry-sector foundation degrees, higher-level apprenticeships, collaborative research, in-company upskilling of employees. Many

<sup>&</sup>lt;sup>1</sup>https://www.gov.uk/government/uploads/system/uploads/attachment data/file/440927/bis 15 352 The dowling review of business-university rearch collaborations 2.pdf, p14

domains have a second dimension, defined by business sector - for example: the creative industries, agriculture, communications, bio-pharma, engineering. Universities operate in specific domains, meeting the needs of a range of businesses; no one university can operate in all domains. The needs of individual businesses align with different domains and successful businesses often collaborate with several universities to meet their needs. Increasingly universities operating in different domains collaborate with each other to provide support for a particular industry or employer; the concept of collaborative advantage is gaining momentum within the university sector and needs to become common practice. <sup>2</sup>

As noted above, the supply chain to innovation is extensive. To capture the essence of engagement, B/HERT recommends a broad definition incorporating all relevant university activities that involve some form of industry partnership.

### 3. How should the scope of the assessment be defined?

Consistent with the recommendation to adopt a broad definition of engagement beyond research activity, B/HERT is of the view that coverage should include all staff who are involved in collaborative projects including general staff who manage WIL programs, research students (u/g and p/g) working with industry, exchange programs as examples.

## 4. Would a selective approach using case studies as exemplars to assess impact provide benefits and incentives to universities?

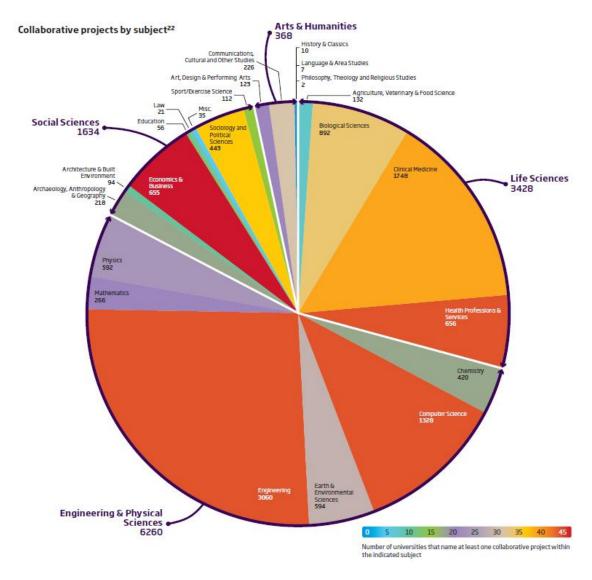
An assessment tool on impact should be robust enough to benchmark the current state of impact and allow for future evaluations of research impact. This information should be collected at the university level (and kept by the university) and compiled to create a national database. What is being proposed is the development of impact criteria that are robust and serve as standardised benchmarks for ongoing utility. The chart on Collaborative Projects by Subject<sup>3</sup> in the Dowling Review illustrates a practical breakdown of university expertise and partnerships. Based on the ERA data framework, impact could be identified at a discipline (or multi-discipline) level.

Research involving impact covers many disciplines and industries. Case studies offer qualitative evidence that are both relevant and informative but cannot translate into a benchmarking tool as described above. Case studies are by definition exemplars.

Any program that offers benefits and incentives to universities to promote impact would be best informed by evidence derived from a quantitative standardised measure as that proposed here.

<sup>&</sup>lt;sup>2</sup> https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/32383/12-610-wilson-review-business-university-collaboration.pdf

http://www.raeng.org.uk/policy/dowling-review/the-dowling-review-of-business-university-research, p20



(Source: The Dowling Review of Business-University Research Collaborations, Figure 8, 20)

### 5.3 Key issues

# 7. What are the key challenges for assessing engagement and impact and how can these be addressed?

The key challenge is to ensure the assessment tool is a robust metric on the implementation of policy objectives related to business/university collaboration. This is particularly important where funding implications are involved. As major stakeholders, business and industry should be directly involved in the development of the tool.

The rich source of information gathered from the assessment tool can be used to profile universities and their teaching and research activities for public presentation. Noting the success of *The Conversation*, translating research outcomes should not be a challenge.

### **5.4 Types of indicators**

### 15. What types of engagement indicators should be used?

The engagement indicators should be derived from the analysis of university activities as recommended above. They should represent all forms of engagement involving teaching and research including multi-disciplinary, multi-party, multi-university activity and taking into account

variables such as the complexity of engagement, extent of contribution of each party, schedule of activities and most importantly outputs and outcomes that have resulted. Some examples of activity reflecting external engagement in universities include:

### Teaching -

- external lecturers
- work integrated learning
- postgraduate/postdoctoral internships
- placements in companies/universities
- participation on industry advisory boards.

#### Research -

- collaborative research programs (eg linkage grants, joint research projects, CRCs, Industry Growth Centres, etc)
- collaborative PhD supervision
- technology transfer
- joint publications/presentations
- joint patents, licencing or IP
- contract/commissioned research.

University engagement activities should be canvassed in the private, public and community sectors. This comprehensive approach will likely uncover engagement activity unknown within individual universities and inform the HE sector as a whole. This is an ideal opportunity to standardise definitions and data collection and clarify the concepts of engagement and impact.

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