

Cynulliad Cenedlaethol Cymru / National Assembly for Wales
Pwyllgor yr Economi, Seilwaith a Sgiliau/ Economy, Infrastructure and Skills
Committee
Ymchwiliad i ymchwil ac arloesedd yng Nghymru / Research and Innovation
in Wales
Ymateb gan Prifysgol Metropolitan Caerdydd / Evidence from Cardiff
Metropolitan University

1. Welsh Government says that there needs to be a “major increase” in research intended to help solve specific challenges facing Wales (challenge-led research). It also says this type of research needs to be balanced with the more traditional type of long-term research undertaken by universities which pushes the boundaries of knowledge. **To what extent do you agree with this view and how can Welsh Government ensure that an increase in one type of research activity doesn't mean the other type loses out?**

Not only is research and innovation a complex ecosystem, but it is not only businesses that engage in applied research. Most (all?) universities engage in either applied research or sponsored research in collaboration with industry, and in doing so deliver major economic benefit - the 2014 REF showed Welsh Universities punching well above their weight.

2. Welsh Government has said it wants to bring all research funding together and that this funding should then be available to small and medium-sized enterprises (SMEs), large private businesses, and other organisations as well as universities and colleges. **To what extent should businesses and other organisations be able to receive Government research funding that might have otherwise gone to universities and colleges? How could this be done without under-funding some organisations – might there be unintended consequences?**

Business and other organisations should not have access to funding that would have otherwise gone to universities. Overall investment in research and innovation needs to go up – diluting the existing funding will not add value. The Reid Review made a strong case for why the Welsh Government should increase investment in research and innovation.

3. In a recent review into research funding, it was argued that there was a strong risk of university research and innovation interests overshadowing the research and innovation interests of private businesses. But it didn't then go on to suggest a way of stopping this happening. **What needs to be done to ensure businesses and their interests are not overshadowed by universities when it comes to research and innovation funding and activity?**

This is one sentence from the Reid review and has been taken out of context – it is about the structure of the Research and Innovation Wales Committee within the new Commission. The overall message from Reid is about funding and supporting both universities and industry. Welsh HEIs punch above their weight in Research impact (REF 2014), and there are

existing avenues for companies to directly benefit from funding for collaborating with universities (e.g. KTPs).

Reid advocated funding that encouraged collaboration between industry and universities. Acting on this recommendation by creating incentives and enabling structures for mutually beneficial collaboration would be the best way to prevent one agenda overshadowing the other. As an example, the three Cardiff-based universities recently collaborated to win £6.8 million of RCUK money to establish a Creative Cluster in Wales which will support university-industry collaboration. Most of this funding will be expended supporting Welsh SMEs.

4. In the academic year 2016/17 there were 241 graduate start-ups reported by Welsh universities with an estimated turnover of £56 million, this was almost double the turnover of university staff start-ups in the same year. **What is currently in place from universities and Welsh Government to help and support student and graduate entrepreneurs turn their ideas into successful ventures?**

Cardiff Met offers a structured support package for student/graduate entrepreneurs including;

- Business skills workshops
- Start-up Bootcamp
- Mentoring
- Start-up advice around registration, tax, marketing etc
- Subsidised or free office and creative incubation space
- Early seed funding – up to a max of £2,500 per graduate, but normally around £1,000.

The University's Centre for Entrepreneurship works closely with Big Ideas Wales and Business Wales to provide additional support for our alumni. There are procedures in place for referrals, and the University also promotes activities such as the Big Ideas Wales Bootcamp to both students and graduates.

5. **Is this support systematic and consistent across Wales and is there more Welsh Government and others could do?**

There are a range of approaches to start-up support from the eight HEI's in Wales. While all HEI's appear to offer support to graduate start-ups this is dependent on access to internal resources and external funding. Seed funding being especially dependant on external funding such as alumni donations or Santander sponsorship.

The support offered through Big Ideas Wales is consistent across Wales, with Entrepreneurship Champions supported in all institutions through the YES project. This funding is due to end in Dec 2018, with ongoing funding still to be confirmed. Access to other Big Ideas Wales services such as Role Models, Bootcamp and Big Ideas Celebrated is open to all and provides a useful resource to both promote and support entrepreneurship, especially in the early pre start phase.

Post start support appears to be less consistent. Cardiff Met has committed resources to support graduate start-ups as this is seen to benefit our students and to build often valuable long term relationship with our most entrepreneurial graduates. Universities are being asked to act as anchor institutions within communities and providing ongoing support to ventures that already have a strong link to the University can play a key role in building this relationship.

It is key that start-up and growth support for graduate businesses retains a strong link to the institution. This will have the following benefits;

- A sense of place for the business – keeping talent in Wales
- Role models for new entrepreneurs – inspiring the next generation
- Ongoing access to academic knowledge and research – building on success

An approach to start-up support that retains this link, whilst addressing some key issues around access to (low risk) early seed funding would be welcomed.

6. The recent review of research made recommendations to help incentivise businesses and universities to work closely together on research and innovation to take their collaborations to “greater heights”. **What are businesses and universities able to offer each other when they work in collaboration on research and innovation projects?**

What used to be called ‘knowledge transfer’ is now usually referred to as ‘knowledge exchange’ in recognition of the two-way benefits of university/industry collaboration. Universities can offer a range of benefits to businesses, including specialist expertise, access to facilities, new knowledge, analysis techniques and peer reviewed validation. In exchange industry offers universities the opportunity to prove and quantify economic and societal impact and improve student experience and graduate employability. Industrial application of university-generated knowledge can also be a good test bed for theoretical processes in real world scenarios where industry benefits from being positioned to apply cutting edge techniques and processes.

There are many documented examples of successful collaborations, as shown in HEFCW’s Innovation Nation publications and NCUB’s ‘Growing Value Wales’, and covering projects including KTPs, SIPs, KESS, Access to Masters and KITE (food sector focussed).

7. **Should Welsh Government and others be doing anything differently to bring smaller businesses together with universities to collaborate on research and innovation projects? What is working well and what isn’t?**

Reinstate Innovation and Engagement Funding. There needs to be two levels of funding:

- i. Infrastructure with a commitment over a number of years to provide the specialist staffing resource to support collaborative projects;
- ii. Project funding to enable specific activities to take place to meet the needs of business and universities.

8. What should Welsh Government and others be doing to help businesses use the knowledge gained from research activity and turn it into marketable products or improved services?

Provide mechanisms to enable sector specific, targeted approaches, such as the KITE Project. The KITE (Knowledge Innovation Technology Exchange) Project was started in 2009 and was funded by the EU and Welsh Government. It facilitated a proactive partnership between Welsh Based food SMEs, affiliates (graduates/individuals with industry experience) and Welsh Food Centres (Zero2Five Food Industry Centre, Cardiff Metropolitan University and Food Technology Centre, Coleg Menai). The programme focused on developing companies' technical expertise towards growing their food and drink based businesses.

One example of how KITE assists companies are programmes to help them reach British Retail Consortium (BRC) or Safe and Local Supplier (SALSA) standards. Gaining these accreditations by ensuring quality control allows food companies to sell to new suppliers, such as supermarkets or international suppliers. Over 30 food businesses were helped to achieve this goal to unlock additional income.

The bank of knowledge and expertise that exists within the programme is a highly beneficial and profitable resource for Welsh-based SME food companies to exploit for their own economic success. Through the dissemination of this knowledge via the KITE programme, the centres help clients achieve measurable outputs and clear financial, environmental and skill-based benefits. For example, launching new products for retail markets.

KITE experts are involved in the new product development process, with 580 new products successfully launched as a result of collaboration. Another benefit for many companies of successful knowledge exchange is increasing operational and supply chain efficiency. KITE consultancy and advice has led to 72 new technical systems being implemented.

KITE's primary aim was to increase sales of Welsh-based food products by £10m by 2014. This goal has already been exceeded, with increased sales of Welsh produce reaching £12m by 2012, £56m by 2014 and £80m by 2015. In addition to increased sales, directly through the 39 KITE programmes, hundreds of jobs have been created and protected: 58.6 new Quality Assurance jobs, 443 new manufacturing roles and the safeguarding of 797 existing jobs.

The KITE programme has relied heavily on cooperation with all of its SME partners, as well as with the Welsh Government and EU funders to make the programme a success.

A similar approach could be taken for other key sectors for the Welsh economy such as medical products, tourism, sport, and aerospace.