

The Learned Society of Wales' response to The Economy, Trade and Rural Affairs Committee's one day inquiry on Research and Development

The Learned Society of Wales (LSW) is Wales's national academy for arts, humanities and sciences. We have nearly 680 Fellows from across all academic fields and beyond. We harness the multidisciplinary expertise, experience and connections of our Fellowship to promote and develop Wales' research and innovation community, and to support the use of excellent and diverse research to solve the challenges faced in Wales and across the world. Established in 2010, the Society is a registered charity, and secured its Royal Charter in 2015.

We welcome the opportunity to respond to the Committee's inquiry, and would like to address some of the issues under consideration using the findings from two recently published reports by LSW.

The first publication is 'Considerations for Innovation Strategy in Wales'.

This report presented the key considerations from six roundtable discussions on different innovation themes, convened by LSW. The roundtables brought together leading innovation practitioners, facilitators and thinkers, led by Professor Rick Delbridge FLSW and provided a valuable insight into the key issues within innovation practice and policy in Wales and beyond.

The key conclusions identified in the discussions include:

- The need for a better narrative of, and for innovation, which captures and contributes to a distinctive culture of innovation.
- Better coordination of opportunities, facilitation of connections, and recognition of the importance of intangible assets, including clusters, could help to catalyse activity
- Investment is required to address capacity and capability issues, coupled with strategies for developing, attracting and retaining talent.

To address the Committee's question of how effective the Welsh Government's Innovation Strategy is likely to be in supporting research, development and innovation in Wales, it should consider whether clarity has been given in the strategy for how the collaborative 'Team Wales' approach will be supported in order to achieve the first two conclusions; a better narrative and the coordination of opportunities.

The final conclusion also remains a concern. In particular, the loss of EU structural funds, which was identified as posing a significant threat to the research base by Welsh Government in <u>Wales</u>: <u>Protecting research and innovation after EU exit</u>. With no significant replacement funding forthcoming since this was identified in 2019, this risk has materialised seeing the end of projects and loss of capacity and capability. Whilst investment remains an ongoing concern, the transition from accessing structural funds to seeking and securing other sources of investment will also require different strategies and capabilities.

The second publication is 'The Impacts of Research from Welsh Universities'.

LSW commissioned King's College London to analyse the 280 impact case studies submitted to the Research Excellence Framework in 2021 (REF 2021). This analysis shines a light on the many ways in which research from Welsh universities enhances local communities and makes a difference across the world. A short summary report provides a dynamic and high-level overview of the core findings is available here: <u>Making an Impact – a celebration of Welsh Research</u>. It highlights the extraordinary achievements driven by research, offering real-life examples that demonstrate how Welsh university research continues to significantly impact lives in Wales and across the globe.

At the heart of the analysis is the idea that Welsh universities are not just academic institutions; they are centres of innovation that play a crucial role in shaping not only Wales' economy and society but the global community. Below are some findings from the analysis that address the Committee's question of how universities and businesses interact and collaborate with each other.

Partnerships with real-world stakeholders: Partnerships form the core of Welsh research. A remarkable 94% of case studies reported impact through collaboration with a partner outside the university. 29% of collaborations were with industry partners. Welsh research impact in 'Energy, Environment and Engineering' and 'Information, Applied Technology and Analytics' in particular had more collaboration with corporate organisations than across the UK.

Economic transformation and employment generation: Economic benefit was a common result of university research impact. These included impacts ranging from job creation and financial returns for the private and public sector, to further investment from government or private partners. Such investments enabled job creation, representing more than 2,500 additional posts across the public and private sectors. In 15% of the case studies, research was reported as enabling innovations such as improved supply chains and improved policies in use by the National Grid. Finally, 12% reported commercialisation of research leading to income generation in, for example, heritage projects.

The report found examples where research impact focused on improving productivity by empowering or supporting individuals or communities to be productive in work, whether, for example, through research on real time data analytics in energy management services being used to upskill employees in areas of deprivation, or improving business performance in Wales through leadership training informed by business and management research. Productivity improvements via processes referred to impacts on technical structures, particularly supply chains, that contribute to improved efficiency.

Transforming processes and enhancing practices: Welsh university research has pioneered transformative changes across sectors. 85% of case studies reported impact in changing processes or practices, culminating in tangible enhancements in sectors like education, public administration, and health. For example, improved secondary breast cancer patient care and a new signalling system implementation processes in use by Siemens.

Local impact with a global reach: 70% of Welsh research had an impact in Wales. This demonstrates the vital contribution of Welsh university research to the success and enrichment of the Welsh economy, society and culture. A third of this research reported impact relevant specifically to Welsh Government priorities. However the impact was by no means confined to Wales, with over 60% describing international impact.

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