Divulga UAB

Revista de difusió de la recerca de la Universitat Autònoma de Barcelona

09/12/2024

Knowledge as Means to Sustainability as an End



Nowadays, there are well-defined indicators to measure the academic impact of research, while its role in sustainability remains unclear. A study involving a researcher from the UAB shows how knowledge mechanisms are a complementary tool for measuring social contributions to sustainable performance, which can be strengthened through the diversification of knowledge transfer.

iStock/juststock

During the last decades, the scientific community and policymakers have revealed an interest in the assessment of the scientific and sustainable impact of research and innovation. While the proxies for measuring academic impact are considerably well-identified, parameters to assess the role of research and innovation that may be related to the sustainable development goals and the grand societal challenges remain deficient. Impact does not merely occur but it is rather an "end" that needs to be cultivated through diverse "means", such as productive interactions and processes known as knowledge mechanisms. Knowledge is perceived as a "linchpin" of innovation and value creation, which has been widely accelerated through the diffusion of communication and technologies.

We provide an evaluative approach by identifying indicators of research as a "means" and their association with sustainability as an "end." We frame these "means" as knowledge and innovation mechanisms and distinguish them according to, first of all, their types of interaction, knowledge and innovation transfer or co-production, and secondly, knowledge's nature, explicit and tacit archetypes. Our main question addressed is *how explicit and tacit knowledge archetypes are associated with sustainability performance*. The analysis relies on an approach to examine transfer and co-production activities in reference to three parameters—diversity, engagement, and impact in two case studies from Spanish Institution. We collect data through interviews, archival data, and peers from 36 stakeholders.

The main takeaways of this study are at three levels: institutional, case study, and sustainability performance.

At the *institutional level*, explicit and tacit knowledge must be used together to optimize performance throughout the realization and dissemination period of a project: explicit knowledge drives diversity in the knowledge and innovation transfer, while tacit knowledge predominately relies on engagement.

At the *case study level*, knowledge transfer is perceived as the stimuli of understanding, innovation, and partnership. The first case study prioritizes engagement that is, transferring and transmitting knowledge to a higher number of participants—tacit knowledge transfer (consultancy). The second case study prioritizes diversity that is, transferring and transmitting knowledge through various channels—explicit knowledge transfer (technical training).

At the *sustainability level*, the findings demonstrate that both explicit and tacit knowledge are associated with health and capacity building pillars in the first case study through the transfer mechanism (sectorial training and consultancy). However, in the second one, tacit knowledge is mainly associated with economic and socioterritorial pillars through transfer (external field visits and consultancy) and co-production mechanisms.

To recapitulate, knowledge mechanisms are considered a complementary tool to translate scientific outcomes into societal contributions. Overall, the diversification strategy, that is, transmitting knowledge through various channels, is more recommendable than the concentration strategy, that is, transmitting knowledge through a single channel.

Nour Chams

Department of Business Universitat Autònoma de Barcelona Nour.Chams@uab.cat

References

Chams, N., Guesmi, B., Molins i Folch, M., Cubel, R., & Gil Roig, J. M. (2024). **Transfer versus co-production: Knowledge as 'MEANS' to sustainability as an 'END'**. *Research Evaluation*, 33(1), rvae032. https://doi.org/10.1093/reseval/rvae032

View low-bandwidth version