ACADEMIA EUROPAEA
CARDIFF KNOWLEDGE HUB

BRIEFING SERIES

Science advice at times of crisis: what roles for universities and academies?

Universities Policy Engagement Network | Academia Europaea Cardiff Knowledge Hub | SAPEA Science Advice for Policy by European Academies | ARIS Advancing Research Impact in Society | Research Impact Canada | SAHECEF South African Higher Education Community Engagement Forum

INTRODUCTION

Science advice to policymakers has come to the fore during recent crises. Structures or networks that facilitate the mobility of research into policy (and vice-versa) have emerged as a key part of the connective tissue within complex research, innovation and development ecosystems. But is the role of these critical inter-connecting structures fully understood or acknowledged? How has their role changed over time? How can we make our networks even stronger and more inclusive in terms of catalysing the societal impacts of public investment in research? 'What works' when it comes to navigating the intersection between research and policy?

At our webinar on 25th April 2022, an expert panel, representing six international policy engagement networks, came together to discuss what we are learning about science advice at times of crisis, and the role of such networks. This briefing is a summary of ideas discussed at the webinar. You can watch a recording of the webinar on our YouTube channel.

Key themes

Defining a crisis is essential. Is it a novel crisis that has defied prediction and produces new challenges? Or is it a 'creeping crisis' whose existence has been recognised for some time - with or without a substantive response? Is the crisis spatially- or sectorally-constrained, and in what ways does it demand an interdisciplinary approach? Who are the stakeholders? How is the crisis being framed? What have we learnt from previous crises about effective and responsive science advisory processes?

We need better integration of science advice into crisis management. There is no 'one-size-fits-all' solution.

The **role and power of data** are very important. What sort of data do we have? Is it reliable and accessible? What limitations are there, and do uncertainties exist? This requires '**data humility**', meaning that researchers are transparent in communicating to stakeholders that their scientific advice is based on the best available data at the time of the crisis. Consequently, the data may be incomplete and, as more data becomes available, the stakeholders will recognise that the advice might change.

The Scholarship of Engagement (SoE) model, derived from Ernest Boyer's integrated scholarships model[1], can be a starting point for facilitating engagement between stakeholders. It brings together all the different forms of scholarship (research, teaching, application and engagement) for societal transformation, social justice and equity. Science is used to inform policy on how to address inequalities, yet the relationship between science and policy is often troubled and still contested – due to the multitude of stakeholders involved, each with conflicting rewards and needs. The SoE model can assist higher education policy forums/networks to overcome this challenge, by providing the opportunity for dialogue around joint knowledge production and fact-finding. **Interaction and collaboration** between science and policy stakeholders can result in stronger partnerships and more impactful research. The challenge for universities is to foster dialogue and play the role of **'honest broker'**, creating spaces where different perspectives can be brought together. It is important to **harness different forms of knowledge**, not just scientific - for example, professional knowledge, lived experience and experiential knowledge. Thus, science advice requires both 'scientific objectivity' *(ontological, epistemological and methodological assumptions)* and 'practical objectivity (*sociological assumptions*). This presents a huge challenge for knowledge synthesis and understanding[2].

An excellent **communications strategy** is helpful. What is the prevailing narrative? How do we develop trusted partners? How do we inform key stakeholders in an appropriate and timely manner? Is the science advice continuously updated, based on new data? The challenge for the next crisis will be how to be heard over the crowd. The key is to leverage technology and counter false information.

Equality, diversity and inclusion (EDI) are critically important, as crises can disproportionately affect equity-seeking groups. Potential barriers must be overcome. Research Impact Canada has set up committees to look into EDI issues, as well as policies on bilingualism. UPEN has published a report on EDI, *Surfacing Equity, Diversity and Inclusion within Academic-Policy Engagement*.

1 Boyer, E. (1996). The scholarship of engagement. *Journal of Public Service and Outreach, 1(1), 11-20.*
2 See Geoff Mulgan's blog on *The synthesis gap.* Available at: https://www.geoffmulgan.com/post/the-synthesis-gap-reducing-the-imbalance-between-advice-and-absorption-in-handling-big-challenges

Accessibility is enhanced through the availability of online platforms and systems, providing a broader reach and boosting attendance by overcoming practical barriers such as time and distance.

Acknowledgement of policy engagement work. Core questions still under discussion include taking account of policy engagement work in research assessment and career progression - at all stages of an academic career.

Political preparedness means educating academics and other experts about policy engagement. Scientists may move to the fore during times of crisis, and it brings opportunities for them to form new relationships and see the science-policy interface in action. At the same time, there are **risks for scientists**. The first is the potential *politicisation* of science advice. Secondly, the narrative that 'policy is following the science' can give a misleading impression that science is homogeneous and has a single answer - which is not the case. Thirdly, there is a risk that advisers can be used by politicians as scapegoats and/or sacrificial lambs. The forthcoming public enquiries into the Covid crisis will be a test; rather than allowing a focus on what went wrong, universities and academies can place the spotlight on learning lessons for the future.

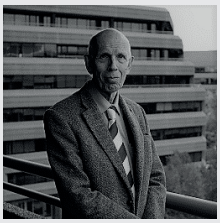
Building an evidence base about policy engagement. The actual evidence base about 'what works' in relation to research-led policy engagement is incredibly thin. A huge amount of investment and activity veils an almost complete lack of practical information about actual impact and influence. There is an urgent need to harvest policy-engagement insights and also to think more strategically about the science of policy advice.

The view from the policy side. Most areas of policy are not dealing with crises but working on long-term policies. Science advice is an art form and personal networks are important. It is important to identify key audiences, and to understand how each party is trying to benefit from the collaboration. Expectations should be realistic; influencing efforts will often fail – policy engagement is very often a 'slow-burn' process, based around incremental change. To maximise the provision and potential of their research, academics need to develop a better understanding of non-academic, research-related professional environments.

Resourcing. A clearer understanding is needed of the infrastructure that links research and users of research (i.e. getting from knowledge creation to knowledge mobilisation). This is especially true in relation to knowledge brokerage structures, where more thought needs to be given to professional skills, funding models and core focus. Universities invest in professional support for engagement between researchers and industry, yet institutional means of support for engagement with community and policy contexts are only beginning to emerge.

Conclusions. The role of academics is changing and it is necessary to design support structures and enhance skills. 'Networks of networks' can be important for mutual learning. International collaboration is helpful. The role of stakeholder communication is crucial, and stakeholder partnership platforms can be useful. At the same time, policymaking is a very human process. Be pragmatic and realistic about the role academics can play within policy-making processes. It is important to remember that engagement processes provide a valuable way of underlining *why research matters* and can often lead to new scientific questions and opportunities.

PANELLISTS






- Professor Ole Petersen MAE, Academic Director of Academia Europaea Cardiff Knowledge Hub (Chair)
- Dr Oludurotimi Adetunji, Associate Dean of the College for Undergraduate Research and Inclusive Science, Brown University
- Professor Matthew Flinders, Professor of Politics and Founding Director of the Sir Bernard Crick Centre for the Public Understanding of Politics, University of Sheffield and Chair, Universities Policy Engagement Network (UPEN)
- Dr Cornel Hart, Senior Lecturer, Community Development Programme, University of the Western Cape, and Board Member of South African Higher Education Community Engagement Forum (SAHECEF)
- Dr David Phipps, Assistant Vice-President, Research Strategy & Impact (Office of the Vice-President Research & Innovation) at York University and Director, Research Impact Canada
- Chris Webber, Head, Open Innovation Team, UK Government

This event was a partnership between Universities Policy Engagement Network (UPEN), Academia Europaea, Advancing Research Impact in Society (ARIS), Research Impact Canada, South African Higher Education Community Engagement Forum (SAHECEF), and Science Advice for Policy by European Academies (SAPEA).

This was a linked event to Science Advice under Pressure.