THE ROYAL SOCIETY



Science diplomacy – 15 years on Roundtable summary

On November 28, 2023, the Royal Society and the American Association for the Advancement of Science (AAAS) held a roundtable discussion focused on their 2010 *New Frontiers in Science Diplomacy* report, and whether, and if so to what extent, it needed to be revised ahead of its 15th anniversary. The discussion focused on (1) what is science diplomacy in the 21st century? and (2) what are the potential downsides or unintended consequences of science diplomacy activities?

Overarching themes

The framework's three pillars – *science in diplomacy, diplomacy for science,* and *science for diplomacy* – remain a useful structure, yet some clarification could be helpful.

Science and foreign policy are more connected, and science has become more integral to policy and diplomacy.

Leading S&T countries are not always philosophically aligned, and do not always share the same research values or guiding norms. In these cases, concern over national security is often heightened, and international scientific collaboration requires extra care.

There is a wider net of science diplomacy stakeholders, including individual and corporate actors that need to be considered.

Even with the increased popularity of science diplomacy, there is a still a need for capacity building in science diplomacy for scientists, diplomats, and policymakers.

Below are seven main points that came out from the discussion.

1. SCIENCE IS NOW A CORNERSTONE OF FOREIGN POLICY

Even more so than in 2010, science is a crucial element of foreign policy. Many of the greatest challenges our world faces (climate change, pandemics, emerging technologies) are scientific in nature and require solutions that lie at the center of science and politics. Additionally, science has been increasingly integrated into other sectors (the law, military, and intelligence), which has made scientific advice, effective science communication, and dialogue with diverse stakeholders more important than ever. Yet, science and science-based solutions are still not well integrated into policy and diplomacy, despite their increased need in our current geopolitical context.

2. LEADING S&T COUNTRIES MAY NOT SHARE THE SAME SCIENTIFIC VALUES OR GUIDING NORMS

The 2010 report emphasized what it considered to be universal scientific values. Since then, there is more awareness that countries (including leading S&T nations) do not always share the same research values, or may not be aligned philosophically, which has led to a view of increasing risks associated with international scientific collaboration and partnerships. National security concerns need to be balanced with the value of international collaboration, and more training is needed on research security. Further, the revised framework should reflect that conflict between countries – for any reason –can alter partnerships between nations. And yet the soft power of science is real. Science can often be the sole route of communication and a key mode of engagement between countries during politically contentious times.

3. RISE OF NON-STATE ACTORS ("TECH TITANS" AND SUB- AND NON-GOVERNMENTAL ACTORS)

Since 2010, there has been an increased role of non-state actors in science diplomacy. Major companies and "tech titans" have scientific, economic and political influence at similar levels to nations, but do not always act in a coordinated fashion, are motivated to be first-to-market, and may not be working in the interests of their nations. Sub-national governmental actors (state, cities) and non-governmental/civil societal actors can also play transformative roles, but better communication is needed across the different levels. A more active role for industry and civil society in science diplomacy is needed.

6. SCIENTIFIC AND NATIONAL INTERESTS MAY NOT BE THE SAME

Scientific and national interests are not always aligned, and scientists and policymakers may not be focused on the greater good alone. International agreements can provide an advantage to domestic scientific and national interests. Science for development can be for altruistic reasons, but it can also be in support of national interests. While there is no doubt that significant benefits can come from international cooperation, these benefits can often be disproportionately allocated, with resources and attention going solely to one nation or one area of science. Science can be a tool for nationalism. Science diplomacy cannot look away from these realities, but rather must face them.

4. SCIENCE AND DIPLOMACY CAN HAVE DIFFERENT TIMESCALES

It is even more apparent that science and diplomacy do not operate on the same timescale. Scientific progress is moving fast, but the adoption of benefits is not, with regulations falling behind in some areas. There is a need for governance/regulation to catch up quickly. Further, immediate crises (like an earthquake) can drown out protracted emergencies (like climate change), as the link between cause and effect can be harder to demonstrate with the effects being felt more slowly. Therefore, policymakers often prioritize immediate needs over long-term benefits. Science diplomacy needs to act on both timescales.

7. CAPACITY DEVELOPMENT IS STILL NEEDED

Even with the increased popularity of science diplomacy since 2010, science diplomacy capacity development is needed. To work together effectively, scientists need a basic understanding of diplomacy, and policymakers need the same of science. While there have been efforts by some countries to improve diplomats' understanding of science, there is a gap in the area of scientists understanding diplomacy, which can lead to missed opportunities. Further, science diplomacy training efforts need to clearly differentiate between formal and informal diplomacy, and science advice vs. science diplomacy.

5. THE RISE OF POPULISM, AUTHORITARIANISM, AND DISTRUST IN SCIENCE

Since 2010, there has been an increase in scrutiny of science and science advice by the public. The COVID-19 pandemic illustrated a greater skepticism toward science advice, highlighted a lack of scientific understanding by policymakers, and demonstrated a rise in misinformation and disinformation. In addition, there has been a rise in populism/ authoritarianism among governments across the globe. Scientists and diplomats must ask themselves how science diplomacy operates effectively amidst these trends.

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