Educating for Science Diplomacy

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Science and technology (S&T), both its practice and products, is becoming increasingly important to international relations and diplomacy. Therefore, the capacity to understand “science diplomacy” is necessary for foreign policy experts and practitioners to use it effectively. The formal and informal education and training of international relations professionals defined broadly, which includes professional diplomats and international science managers, are key components of increasing this capacity. Education and training ranges from courses affiliated with foreign ministries, such as the U.S. Department of State’s Foreign Service Institute (FSI), to postgraduate programs at schools of public policy and international relations.

Science diplomacy education and training can comprise a wide range of subjects, from broad themes to specific topics. Certain S&T-related international relations issues, such as weapons of mass destruction and other international security topics, are well covered. More recently, environmental science policy, water diplomacy, and other natural resource issues have also received attention. However, these topics have typically been targeted at specialists, not necessarily the broad array of international relations professionals. Given the pervasive nature of S&T, topics and resources can and should also be integrated and directed at a more general audience.
Professionals in the diverse sectors that are inherently international in nature and necessitate strong connections between technical and policy expertise—even beyond the more established areas of trade, environment, natural resources, and security—can benefit from some type of science diplomacy education and training at different stages of their careers. For example, U.S. foreign service officers, who typically do not have S&T backgrounds, entering into overseas positions responsible for ESTH (environment, science, technology, and health) issues receive orientation-type training at FSI that surveys relevant S&T-related policies.

The means to teach science diplomacy is intimately connected with who is learning and what is to be taught. Different institutions and programs, from public policy and international affairs professional schools to diplomatic training centers, can offer a spectrum of courses, workshops, and even laboratories that reflect their individual expertise and satisfy the needs of a diverse array of international relations professionals. Graduate schools offer individual courses, specialty seminars, and even entire degrees on various topics of science diplomacy. Foreign ministries and diplomatic academies can help train a country’s diplomats in addressing S&T-related foreign policy priorities. They can also open their doors and provide hands-on learning to S&T professionals with interests in diplomacy.

The American Association for the Advancement of Science (AAAS) Center for Science Diplomacy and its policy journal, *Science & Diplomacy*, have initiated an effort to begin to help build the foundations and resources for science diplomacy education and training. The center recently organized a roundtable discussion on the topic “Educating for Science Diplomacy,” which brought together practitioners and educators to address some of the key issues in this area. Beyond a better understanding of the current “who, what, and how” of various aspects of science diplomacy education and training, the roundtable identified gaps related to the topics addressed, resources available, and mechanisms in place. The discussion involved ideas on ways to meet future needs and to articulate integrated or systemic approaches to science diplomacy education and training that may be generally applicable to international relations professionals. Some important recommendations from the roundtable included the development of an analytical framework for teaching science diplomacy and all its components and the construction of a structured database of existing courses and science diplomacy-related organizations.

Furthermore, in collaboration with The World Academy of Sciences (TWAS), the center has developed a short course surveying contemporary science diplomacy topics that is targeted toward diplomats, policy makers, and early career scientists from developing countries. The week-long course will be offered for the first time this summer in Trieste, Italy (and on a regular basis in the future).

To provide education resources, *Science & Diplomacy* has developed a series of readers (compendia of selected articles) around specific science diplomacy topics. Each reader includes a series of discussion questions that probes the topic and the associated articles. The first three readers, which can be accessed at
http://www.sciencediplomacy.org/education-resources, focus on national approaches to science diplomacy; transboundary issues and shared spaces; and international research and large-scale infrastructures. Over time, additional readers will be released on other important science diplomacy topics. The readers are freely available and distributable for noncommercial use, in line with the open-access policy of *Science & Diplomacy*.

The education and training of science diplomacy practitioners and policy makers requires a broader intellectual foundation. We believe that the activities undertaken thus far represent important first steps toward contributing to this effort. We hope that the center and its publication can continue to provide leadership in educating the next generation of science diplomats. 

**Endnotes**