InsSciDE

Inventing a shared Science Diplomacy for Europe

A Horizon 2020 project involving 11 European countries, 2018-2021 and targeting Diplomats, Scientists and Researchers, and Policy makers

Deliverable D9.9

Collected Teaching and Training Materials

This deliverable is part of a project that has received funding from the European Union's Horizon 2020 research and innovation programme

Grant Agreement No: 770523

Project dates:

1 December 2017 - 30 June 2022

www.InsSciDE.eu

InsSciDE has received funding under the European Union's Horizon 2020 research and innovation program (Grant Agreement No 770523, 2018-2022)

To be cited as:

Daniella PALMBERG "Collected Teaching and Training Materials". Deliverable n° 9.9 for the H2020 InsSciDE project, submitted by UNESCO, June 2022.

This report was prepared under Grant Agreement n° 770523 from the European Commission.

Deliverable title:	Collected Teaching and Training Materials
Deliverable n°:	D9.9
Nature of the deliverable:	Other
Dissemination level:	Public
Lead beneficiary:	UNESCO – partner n°4
Lead author:	Daniella Palmberg, UNESCO, palmberg.daniella@gmail.com
Contributing authors:	Claire Mays
Reviewed by:	Claire Mays, SYMLOG;
Approved by:	Ana Persic, UNESCO
Due date of deliverable:	Month n° 54
Submitted to coordinator:	Month n° 55

Table of Contents

InsSciDE PROJECT PARTNERS

#	Institution and lead investigator	Short name	Country
1.	**CNRS (Sorbonne Université) - Pascal Griset**	**CNRS**	**FR**
2.	European Academy of Diplomacy - Katharzyna Pisarska	EAD	PL
3.	Institut SYMLOG – Claire Mays	SYM	FR
4.	UNESCO – Ana Persic	UNESCO	INTL
5.	Universitetet i Tromso – Rasmus Bertelsen	UiT	NO
6.	Universidade Nova de Lisboa – Maria Paula Diogo	NOVA	PT
7.	(partner withdrawn)		
8.	Royal Institute of Technology – Nina Wormbs	KTH	SE
9.	Università degli Studi di Padova – David Burigana	UNIPD	IT
10.	Universität Wien – Katharina Paul	UNIVIE	AT
11.	Johannes Gutenberg University Mainz – Alexander Pruss	JGU Mainz	DE
12.	Swedish Inst. of International Affairs – Björn Fägersten	UI	SE
13.	Chalmers University of Technology – Anna Aberg	CHALM	SE
14.	U. of Veterinary Medicine Budapest – Matthew Adamson	UVM	HU
15.	University of Manchester – Simone Turchetti	UoM	UK
16.	(partner withdrawn)		
17.	Friedrich-Alexander-Universität Erlangen-Nürnberg – Maria Rentetzi	FAU	DE

ABSTRACT

The Warsaw Science Diplomacy School (WSDS) was a flagship program of the InsSciDE project, co-organized by seven of its international project partners: the European Academy of Diplomacy (EAD), UiT The Arctic University of Norway, Centre national de la recherche scientifique (CNRS), Swedish Institute of International Affairs (UI), Symlog and UNESCO.

Hosted online 22-26 June 2020 and 21-25 June 2021, the training embodied InsSciDE founding principles of historical connections and interdisciplinary dialogue, while fostering an intimate and constructive environment in a Zoom-intensive week of debate, analysis and fun.

The necessary transformation of WSDS from an in-person experience in Warsaw to a virtual format elevated the program's reproducibility potential, strengthened the cohort diversity and inspired innovative ways to network and bond online. Content from both years has been compiled into this 'Collection of Training Materials' for future teachers and trainers of science diplomacy to draw on, be inspired by or replicate.

The collection as presented here is composed of several individual sheets of training instruction pertaining to methodology, simulation exercises, discussion materials and more. The collection will be preserved in the Training Materials section of the EU Science Diplomacy Alliance's online resource library, together with existing materials by Horizon 2020 project S4D4C and future productions by Alliance partners.

https://www.science-diplomacy.eu/training-materials/

D9.9 (next page)

Application Inspiration for Science Diplomacy Training

Based on the application to the online program Warsaw Science Diplomacy School 2021

DESCRIPTION

Introduction

The Application Inspiration for Science Diplomacy Training can be used to consider how an application process requiring thoughtful input can support the selection of a balanced and promising cohort. The example application provided was used to evaluate candidates for the Warsaw Science Diplomacy School 2021.

Background

The Warsaw Science Diplomacy School (WSDS) was a flagship program of the InsSciDE project, co-organized by seven of its international project partners: the European Academy of Diplomacy (EAD), UiT The Arctic University of Norway, Centre national de la recherche scientifique (CNRS), Swedish Institute of International Affairs (UI), Symlog and UNESCO.
Hosted online 22-26 June 2020 and 21-25 June 2021, the training embodied InsSciDE founding principles of historical connections and interdisciplinary dialogue, while fostering an intimate and constructive environment in a Zoom-intensive week of debate, analysis and fun.
The necessary transformation of WSDS from an in-person experience in Warsaw to a virtual format elevated the program's reproducibility potential, strengthened the cohort diversity and inspired innovative ways to network and bond online.

WSDS 2021 APPLICATION

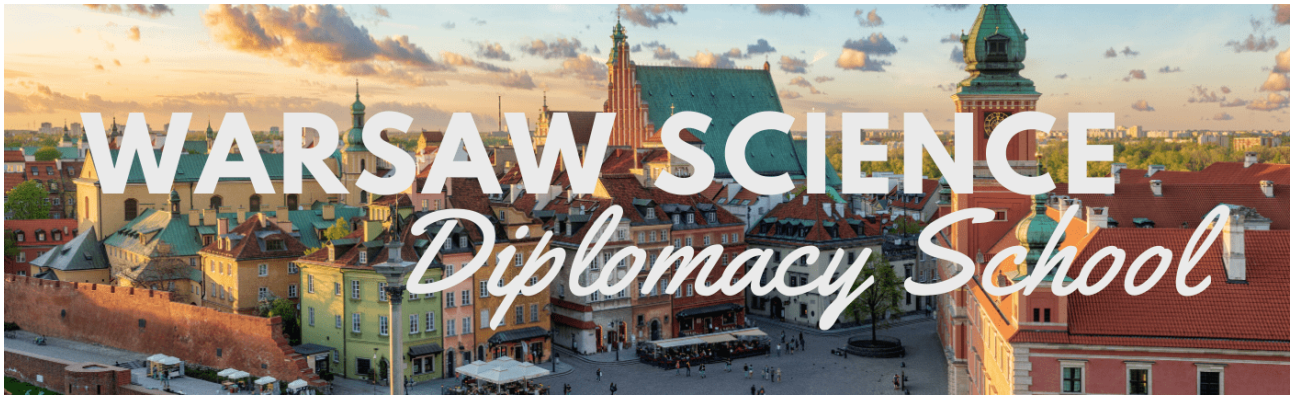
In WSDS 2021, twenty-four multidisciplinary and global students were carefully selected from over one hundred applications received. The application is on the next page.

Candidates were required to submit a CV, personal statement and two short essays in their application. Many supplemented their application with a nomination from a notable institution. A nomination entailed a short email recommending the candidate by a representative of a particular institution.

The application was created and submitted on the website www.cognitoforms.com.

InsSciDE has received funding under the European Union's Horizon 2020 Research and Innovation programme (grant agreement n° 770523, 2018-2022)

Warsaw Science Diplomacy School 2021 Application



H2020 InsSciDE.eu *and the* ***European Academy of Diplomacy's***
Warsaw Science Diplomacy School (WSDS)
21-25 June 2021
This second edition of WSDS is held online.
Accepted candidates will be responsible for ensuring they have adequate internet access and basic tools like webcamera.

The application form remains open until midnight CET, ***Monday 5 April 2021 (extended from 31 March).***
This online form allows you to "save and resume" your work.

Personal and professional information

Name *

First

Last

Email *

Phone

Date of birth *

Gender *

- Prefer not to say
- She/her/hers
- He/him/his
- They/them/their

Your nationality *

Your country of residence

If different from nationality

Please indicate your academic level: *

InsSciDE's Warsaw Science Diplomacy School focusses on the family of practices called science, technology, knowledge, and/or innovation diplomacy ("SD"). WSDS21 seeks a diversity of professional and/or graduate level candidates who have identified science diplomacy as a serious area of interest (and who in some cases may have engaged in research on the topic, play or have played a science diplomat role).

WSDS20 last year welcomed students from across disciplines, ranging from masters to post doc level, with a large proportion of students active in professional life. Ages ranged from 25 to 45 years.

Which best decribes your academic discipline or training? *

- ○ STEM, Environmental sciences, Health...
- ○ Diplomacy, International relations, Political science...
- ○ Other Humanities, Social sciences, Economics, Management...
- ○ Other

Which best decribes your current professional practice or domain? *

- ○ STEM, Environmental sciences, Health
- ○ Diplomacy, International relations
- ○ Humanities, Social sciences, STS
- ○ Business, Industry, Social partners
- ○ Other

Please indicate the number of years you have worked: *

You may count years spent in doctoral research, or in concurrent professional activity/graduate education.

In which of these domains do you have previous professional experience? *

- ☐ STEM, Environmental sciences, Health
- ☐ Diplomacy, International relations
- ☐ Humanities, Social sciences, STS
- ☐ Business, Industry, Social partners
- ☐ I have worked only in my current professional domain
- ☐ Other

Choose all that apply

Current company or organization *

Current position *

Have you previously taken the S4D4C European SD Online Course?

○ Yes ◉ No

Candidates accepted to WSDS21 will be asked to follow particular modules of our sister project's free self-paced online course before mid-June 2021, so that all WSDS students will have similar basic knowledge. (Your answer does not affect assessment of your application.)

Are you a member of Marie Sklodowska-Curie Alumni Association (MCAA)?

○ Yes ◉ No

(Your answer does not affect assessment of your application.)

Personal data processing consent following General Data Protection Regulation (EU) 2016/679

I agree to the processing of my personal data (including: name, telephone number, e-mail address, date of birth, nationality, address of residence, data on education, professional experience data, other information recorded in this form) by the European Academy of Diplomacy with headquarters in Warsaw, address: ul. Oleandrów 6, 00-629 Warsaw, KRS: 0000289736. If accepted to the WSDS I agree to appropriate use of my photographic image for internal student documents, and for external information materials (with fair warning). The above consent is expressed voluntarily and can be withdrawn at any time.

I agree.

○ Yes ◉ No

CV and Statement of Motivation

Curriculum Vitae *

Upload or drag files here.

*Please upload a **summary or brief CV** (including most relevant publications, if any) in PDF or Word format.*

Statement of Motivation

Why would you like to attend InsSciDE Warsaw Science Diplomacy School? What can you bring to WSDS?

You may wish to briefly explain: the events or challenges that led you to become interested in Science Diplomacy (you may abbreviate as SD); the practical settings in which you are exposed to SD; the contexts in which you would like to, or do, exercise SD skills or add to SD knowledge; a particular interest you may have in one of InsSciDE's case studies.

Please highlight your specific experience or skills that you believe can enrich the small-group discussion of our European Science Diplomacy cases and/or the strategy-building exercises.

Max 2000 characters including spaces *

Case Studies and Narratives

InsSciDE's Warsaw SD School uses historical case studies to draw lessons and strategic outlooks for today and tomorrow.

*For this application, we would like to hear about **a case or a story of science diplomacy that is familiar to you.** What would be a good case for a future summer school?*

1. A science diplomacy case or story that stands out for you (non-InsSciDE case) (500-1000 characters including spaces) *

Please click here and read the short descriptions of the topics that will be taught at WSDS21 by InsSciDE Case Study Authors. Tell us which case you would prefer to focus on if accepted to the school:

2. Rank your preference for joining one small group discussion team around an InsSciDE case study

	First choice	Second choice	Third choice	Fourth choice
Constructing ITER: Reciprocity and compromise in fusion science diplomacy *	○	○	○	○
Space diplomacy in the Cold War context: Cooperation vs. competition *	○	○	○	○
Workers' strike of 1963 at the German excavation of Tell Chuera: An example of the persistence of colonial practices in Near Eastern archaeology? *	○	○	○	○
The role of data in global vaccination governance: a matter for health diplomacy *	○	○	○	○

Required Essay

Select and reply to one of the 3 prompts below, in approximately 400-650 words. We recommend that you develop your essay in a separate file and paste your text into this form. You may abbreviate "science diplomacy" as "SD".

Please submit only ONE essay in response to any of the below prompts:

A - Humanity is surrounded by complex global, cultural, environmental, social and technological systems. Their interaction drives existential threats, from biosafety and climate change to cyber/space security and nuclear arms control. **What does it mean to think and act across these systems as individuals and collectives to address existential threats? Does SD facilitate this systems approach-- and/or exacerbate the threats?**

B - Non-state actors - including business, industry and social partners - are major actors of science, technology, knowledge and innovation diplomacy today. **Are commercial and economic concerns incompatible with, or indissociable from, SD practices? How do you view the relations between promoting such private sector and national interests and science diplomacy?**

C - The European Commission views SD as "an effective tool for the EU to overcome political deadlocks, to unite actors in sensitive political contexts around major challenges, to strengthen its role as a global actor, to promote world peace and development" and emphasises multilateralism. **In applying SD, are there tensions to be foreseen between national interests and regional or global interests? Do particular world regions trigger specific tensions? What strategies can address these various tensions?**

Indicate the prompt to which you choose to reply: *

◯ A ◯ B ◯ C

Max 4000 characters including spaces *

Nomination

Please fill in this section **only** if you have already received a nomination to apply to WSDS21.

Receiving a nomination means an organization has expressed their support of your application and been in contact with InsSciDE. Click here *to learn more about the nomination process on the event page.*

Nominating institution

◯ University

◯ National Academy (of sciences, engineering, etc.)

◯ Ministry (of foreign affairs, health, education, etc.)

◯ Business

◯ Non-profit or Civil society organization

◯ Other

Institution name

Country

Contact person

Please indicate who submitted your nomination to the InsSciDE project.

Contact email

Contact phone number

Anything else we should know about the nomination?

Thanks for your thoughtful application

We appreciate the effort that the dozens of candidates put into their essays.

Please note, we cannot consider incomplete applications.

As in any academic context, quotes from uncited sources (plagiarism) will result in immediate discard of the application.

Your form can be saved and resumed. Once you hit "submit" your form can no longer be altered. Don't wait until the last day to complete your app!

How did you learn about Warsaw Science Diplomacy School?

Use the drop-down menu, or fill in other replies.

Please tell us who helped you learn about WSDS.

Submit

SciDip Trivia

Based on SciDip Trivia Night hosted online by InsSciDE for World Science Day 2020

DESCRIPTION

Introduction

Social activities are an effective way to help trainees build connections within their cohort. A well-placed game may also serve as a highly valued pause in a heavy curriculum or conference program. Get inspired by this game of SciDip Trivia and host it online or in person.

Learning objectives:

- Have fun testing knowledge about SD and related topics while competing in teams.

Structure *(virtual game)*:

Materials:

- Trivia game application such as Slido, Mentimeter, Kahoot, Connecteam
- 'SciDip Trivia Questions Pool', a list of trivia questions to choose from
- Two or more game hosts

Preparing the game:

1. Choose questions from the SciDip Trivia Questions Pool and add them to the trivia application
2. Assign game host roles - choose from animator/main host, scoring, technician.
    a. Animator - explains game to participants and reads the questions
    b. Questions tech - shares screen with the trivia app and timer, moves between questions
    c. Teams tech - notes team names and members and keeps score, if needed, and manages break out groups
3. Practice using the trivia application with Zoom
4. Host the game!

Hosting the game:

1. Participants sign into Zoom - keep a gallery view and encourage videos on to make it more personal
2. Instructions of the game - players sign into the quiz app, host reads the question, participants are placed in breakout groups for 3 minutes, *no Googling allowed.*
3. Host reads questions and multiple choice answers displayed on a shared screen
4. Participants are split into breakout groups and technician starts the timer for 3 minutes
5. Participants return to plenary to discuss the answer to the previous question (*optional*) and to read the next question
6. Repeat steps 3-5 until questions are finished
7. Announce the winners!

Possible modifications:

- *To host in person:* use a projector to show the questions and multiple choice answers. Have the participants sit in huddles with their teams and display their answers at the same time on paper or a whiteboard. Allow 1-2 minutes of team discussion per question instead of 3 minutes.
- *To avoid coming in and out of breakout groups*: try using another virtual meeting programme in which the host can be visible to all during breakout groups. One such program is GatherTown, which also uses avatars for participants.

QUESTIONS POOL

Question	Answer	Notes
Which technology got a serious boost when it was used in Joint Verification Experiments by the US and the Soviet Union to detect nuclear detonations? ● Sonar ● Radar ● Multi-spectral imaging ● Seismography	Seismography	
In the late nineteenth century, six colonial powers competed scientifically, diplomatically and militarily for the colonization of Africa. They were: ● Britain, France, the Netherlands, Germany, Italy, Spain ● Britain, France, the Netherlands, Russia, Spain, Portugal ● Britain, France, the Netherlands, Germany, Portugal, Italy ● Britain, France, the Netherlands, Germany, the United States, ● Russia Britain, France, the Netherlands, Germany, Denmark, the United States	Britain, France, the Netherlands, Germany, Portugal, Italy	

Question	Answer	Notes
Matteo Ricci was a Jesuit from Italy in the 16th century, sent to China to spread God's word and convert its people to Christianity. Ricci learnt the country's languages, mores and customs, and used European scientific knowledge to establish good relations with and within his host country. In which two scientific areas were his contacts particularly interested? ● Physics ● Medicine ● Chemistry ● Mathematics ● Astronomy	Mathematics Astronomy	
As an early "Scientific Diplomat", Matteo Ricci was finally agreed access to the Capital city, because his gift had stopped functioning and needed repairing. What gift are we talking about? ● A mechanical clock ● A telescope ● A rifle ● A microscope	A mechanical clock	
SESAME is a cooperative venture by scientists and governments of the Middle East, aimed at fostering scientific and technological excellence in the region and building scientific and cultural bridges between diverse societies. It stands for *Synchrotron-light for _____ Science and Applications in the Middle East*. *Free response question*	Experimental	
Which of the below countries are involved in the "SESAME" project? Select all that apply. ● Egypt ● Iran ● Israel	(All) Egypt Iran Israel Jordan	All current members of SESAME are Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestine, and Turkey. https://www.sesame.org.jo/

Question	Answer	Notes
• Jordan		
CERN has 23 members. With the exception of one, these are all European countries. Which country is the non-European CERN member? • Japan • Israel • Canada	Israel	The CERN convention was signed in 1953 by the 12 founding states Belgium, Denmark, France, the Federal Republic of Germany, Greece, Italy, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom and Yugoslavia, and entered into force on 29 September 1954. Today CERN has 23 Member States: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Israel, Italy, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Spain, Sweden, Switzerland and United Kingdom. Cyprus and Slovenia are Associate Member States in the pre-stage to Membership. Croatia, India, Lithuania, Pakistan, Turkey and Ukraine are Associate Member States. https://home.cern/
The naturalist José Correia da Serra was a close friend of the USA President Thomas Jefferson. In this capacity he engaged in informal diplomatic contacts anchored on intellectual and friendly debates. This type of casual diplomacy is known as? • Teacup diplomacy • Coffee diplomacy • Tea diplomacy • Biscuit diplomacy • Coffee mug diplomacy		Jefferson even honored his friend Correia da Serra by naming a room in his Monticello's estate as: The Abbé's room (another first name of his).

Question	Answer	Notes
Britain's polar ship the Sir David Attenborough made its maiden voyage to Antarctica in 2021. The 200 million pound ($260 million), state-of-the-art, polar research vessel, also has an unofficial title which topped a public poll to name the vessel in 2016. What is it? ● The Healer ● Million dollar boaty ● Antarctic Icescapade ● Boaty McBoatface	Boaty McBoatface	
Which of the below was explicitly referred to as a "master-stroke of scientific diplomacy" in a book by Giorgio de Santiallana in 1955? ● The signing of the Partial Test Ban Treaty ● The dedication of Jupiter's satellites to the House of Medici ● China's entrance in the International Astronomical Union ● Setting up the Republics of Letters	The dedication of Jupiter's satellites to the House of Medici	

Question	Answer	Notes
What are the names of the three projects that founded the EU Science Diplomacy Alliance? ● El-Cid, InSiDe and S4D4C ● EL-CSID, InsSciDe and S4D4C ● H2020, SciDip and SocSci ● L-SID, Inside, essfourdeeforesee	EL-CSID, InsSciDe and S4D4C	With the aim of defining its strategy for a regional science diplomacy, the European Union launched three complementary projects – El-CSID, InsSciDE, and S4D4C – funded by the EU Horizon 2020 Research and Innovation programme. Through multidisciplinary research and dialogue, the projects generated frameworks for governance, strategic advice, training modules for diplomats and scientists, and knowledge on science diplomacy histories. In 2022, InsSciDE became the last of the projects to conclude.
Which non-human being is very important to Science Diplomacy at INGSA? *Free response question*	SPIDER (Science Policy in Diplomacy and External Relations)	SPIDER is a special interest division in INGSA.

Question	Answer	Notes
Name 2 women who have served as Ambassadors to the Arctic? *Free response question*	Hanne Fugl Eskjaer (Denmark) Segolène Royal (France) Marie-Anne Coninsx (EU)	
In his case study paper for InsSciDE, Sam Robinson of the work package 'Environment' dissects tensions between the Global North and South during the ad hoc UN seabed committee (1967–1972) and the subsequent UN Law of the Sea III conferences (UNCLOS III; 1973–1982). What does he argue played a major role in provoking these tensions? *Free response question*	Scientific imaginaries *Also accepted*: science imaginaries, scientific imaginations, technoscientific imaginaries	Scientific imaginaries refers to visions of science and tech in the future: "Promoters of ocean exploitation in the late 1960s envisaged wonders such as rare mineral extraction and the stationing of divers in underwater habitats from which they would operate seabed machinery not connected to the turbulent surface waters. Their promises coincided with others' fears that nuclear weaponry would be placed on the seabed. Those who lacked the technological capability to extract minerals from the seabed also had concerns that other nations would exploit their resources." (Robinson, 2020)

Question	Answer	Notes
Name the diplomatic service of the European Union? *Free response question*	European External Action Service (EEAS)	
When was the Antarctic Treaty signed? ● 1959 ● 1969 ● 1974 ● 1982	1959	
What is the nickname of the Arctic environmental treaty signed in 1974? ● Penguin Treaty ● Walrus Treaty ● Polar Bear Treaty ● Caribou Treaty	Polar Bear Treaty	

Question	Answer	Notes
Which 2 organizations collaborated to propose the notion of science in/science for diplomacy, diplomacy for science? *Free response question*	Royal Society UK and the American Association for the Advancement of Science (AAAS)	
Who is the conservationist that pioneered environmental diplomacy? ● Sir Peter Gluckman ● Rachel Carson ● Jane Goodall ● Russell Train ● Jacques Costeau	Russell Train	
Countries in the EU and the Mediterranean area have negotiated and launched joint research calls funded by both sides through this program, often cited as a prime example of European SD. What is it called? Acronym only. *Free response question*	PRIMA	PRIMA – Partnership for Research and Innovation in the Mediterranean Area

Question	Answer	Notes
Which of these global accords were signed in 2015 thanks to science diplomacy? ● Paris Agreement (United Nations Framework Convention on Climate Change COP 21) ● Sendai Framework for Disaster Risk Reduction ● Transforming our World: The 2030 Agenda for Sustainable Development (Sustainable Development Goals) ● The Joint Comprehensive Plan of Action, known commonly as the Iran nuclear deal ● All of the above ● None of the above	All of the above	
Which family has gathered the most Nobel prizes? *Free response question*	The Curie family	Marie Curie - Physics 1903, Chemistry 1911 ; Pierre Curie - 1 (Physics 1903) Irène Jolio-Curie – Chemistry 1935 ; Frédéric Joliot-Curie – Chemistry 1935

Question	Answer	Notes
The naturalist José Correia da Serra was a close friend of the USA President Thomas Jefferson. In this capacity he engaged in informal diplomatic contacts anchored on intellectual and friendly debates over a cup of tea (tea-cup diplomacy). Jefferson honored his friend by naming a room in his Monticello's estate as: ● The Abbé's room ● Correia's room ● Tea Room	The Abbé's room	Learn more: ● https://www.monticello.org/thomas-jefferson/a-day-in-the-life-of-jefferson/museum-in-the-entrance-of-the-house/visitors-to-monticello/ ● https://en.wikipedia.org/wiki/José_Correia_da_Serra ● https://www.scielo.br/pdf/vh/v33n63/0104-8775-vh-33-63-0625.pdf
In which function did the first European excavators of archaeological sites in Mesopotamia come to the region? ● As military commanders of invading troops ● As diplomats ● As commercial representatives of trading companies ● As engineers searching for oil deposits	As diplomats	Learn more: https://en.wikipedia.org/wiki/Austen_Henry_Layard, https://en.wikipedia.org/wiki/Paul-Émile_Botta

Question	Answer	Notes
Which reason – apart from the historic importance of the site – prompted British excavations at Carchemish on the Euphrates in 1912–14? ● The excavators were asked to deliver weapons to regional Arab and Kurdish tribes which were planning an anti-Turkish insurgence ● The excavations should please the Ottoman Sultan who was born in a nearby village ● The excavation team should monitor German engineers constructing the Berlin-to-Baghdad Railway (x) ● The excavators wanted to search for traces of Noah's ark at nearby Mount Ararat	The excavation team should monitor German engineers constructing the Berlin-to-Baghdad Railway	Learn more: https://en.wikipedia.org/wiki/Leonard_Woolley
The UNESCO world heritage site of Hatra in Iraq, heavily damaged by Islamic State terrorists in 2015, is one of the most important sites for the culture of which empire? ● Parthian Empire ● Assyrian Empire ● Babylonian Empire ● Byzantine Empire	Parthian Empire	Learn more: https://en.wikipedia.org/wiki/Hatra

Question	Answer	Notes
The Madrid Declaration on Science Diplomacy outlines the benefits of… ● ... getting the Champions League to donate € to science cooperation ● ... evidence-informed policies with a biased science advice ● ... improved interfaces between science and public & foreign policies ● ... convincing diplomats to study Theoretical Physics	... improved interfaces between science and public & foreign policies	Learn more: https://www.s4d4c.eu/s4d4c-1st-global-meeting/the-madrid-declaration-on-science-diplomacy
Which advisor has the office next to the science advisor in the European External Action Service? ● the religious advisor ● the advisor on how to deal with Donald Trump ● the advisor on lifelong learning ● the advisor on water conflicts ● Source: report on the webinar 3, will be published tomorrow the latest	The religious advisor	
Countries in the EU and the Mediterranean area have negotiated and launched joint calls which are funded by both sides. When was the first call of the PRIMA programme published, which is often cited as one of the examples of European Science Diplomacy? ● 2012 ● 2014 ● 2016 ● 2018	2018	Learn more: https://www.s4d4c.eu/knowledge_resource/partnership-for-research-and-innovation-in-the-mediterranean-area-prima/

Question	Answer	Notes
Signed on 13 October 2020, the _____ will be the broadest and most diverse international human space exploration program in history.	Artemis Accords	
The InsSciDE project '*Inventing a shared Science Diplomacy for Europe*' was a Horizon 2020 project focused on historical research and development of resources for science diplomacy theory, practice and learning. What was the full form of the abbreviation 'WSDS', InsSciDE's training program hosted June 2020 and 2021? *Free response question*	Warsaw Science Diplomacy School	

PILOT EXPERIENCE

InsSciDE hosted SciDip Trivia virtually on the occasion of the World Science Day in November 2020. Below is a copy of the event announcement, which encouraged participants to team up ahead of the event and provided some resources to help science diplomacy novices level up their knowledge ahead of the game.

November 2020

SciDip Trivia Night for World Science Day!

UNESCO has announced that the 2020 theme of World Science Day for Peace and Development next week is Science for and with Society.

InsSciDE invites every participant of society, whether out of a newfound curiosity or as a contender for the trivia throne, to come test their knowledge in the crosscutting field of science diplomacy during our SciDip Trivia Night on **12 November at 18-19h CET**!

Scroll to the bottom to register.

Get your SciDip buddies together or recruit new ones to build a Trivia Team and get ready to venture into the depths of the history, present and disputed territories of science diplomacy in an evening of **competition, teamwork and fun**. Hint for assembling your team, as always, strength lies in diversity!

See our event on Facebook to RSVP and find teammates

Under the vast umbrella of science diplomacy, the trivia night will traverse themes explored in InsSciDE's research – **heritage, health, security, environment, space** – with questions related to recent and historical events and science diplomacy concepts and famous projects.

Are you in?

- Register below (or click here to open the registration page separately).
- Team up - recruit your friends, find teammates through our Facebook event page, or be paired at random!
- Read up - to level the playing field for science diplomacy novices and experts alike, we provide the below resources to help you prepare for a stimulating, competitive and fun event!

PREP RESOURCES:

Key words *(as they relate to science diplomacy)*

Arctic | Cold War | SESAME | EU Science Diplomacy Cluster | Madrid Declaration | UNESCO world heritage | PRIMA | Innovation | INGSA | EC Group of Chief Science Advisors | Global Accords | Antarctic | Colonization | CERN | Nobel Prize | European

Commission | Warsaw Science Diplomacy School (WSDS) | Power | Culture

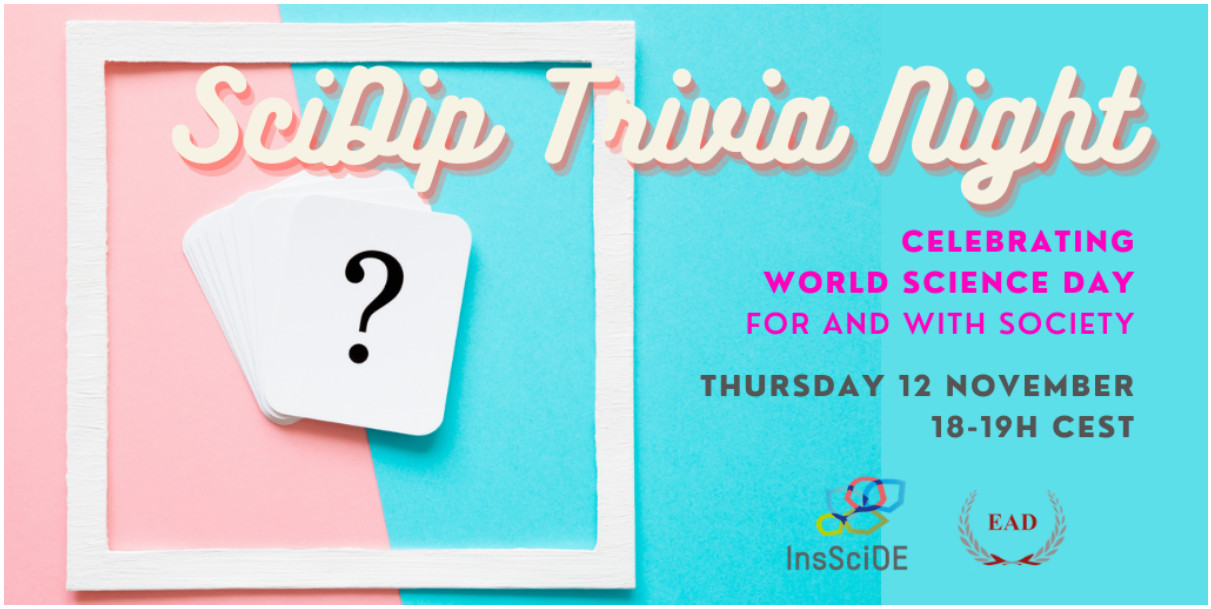
Sources:

EU Science Diplomacy Cluster website (now known as the EU…*Alliance*)
InsSciDE Library - *hint: home in on the* ***Open Access*** *papers!*
S4D4C Recent Events
WSDS Chronicles
WSDS Student Takes

Research work packages: WP4. Heritage, WP5. Health, WP6. Security, WP7. Environment, WP8. Space

Media

What is Science Diplomacy by S4D4C?
Covid-19 and Science Diplomacy webinars
Lecture on Power from WSDS 2020



Science Diplomacy Ally Talks

A means for fostering exchange and building connections between science diplomacy communities

DESCRIPTION

Introduction

Science diplomacy is grounded in dialogue, networks and exchange of ideas. Science Diplomacy Ally Talks is a structure that pairs professionals or students new to science diplomacy with a more experienced or differently focused member of the science diplomacy community. In a closed meeting online or in person, the invited 'Ally' engages with a small group to mutually exchange experiences, thoughts and questions about science diplomacy and beyond. The discussion might cover anything from career advice and common professional interests to the role of science diplomacy in a particular profession or a specific geography.

Objectives

The encounter is intended to be a stimulating experience for both sides of participants (the 'Allies' and the 'group') and to connect people who may otherwise not have the opportunity to interact. Objective may include to:

- Foster exchange across different generations of science diplomacy practitioners or academics
- Enable connections to form between differently focused members of the science diplomacy community
- Allow junior participants to receive career advice, gain insight into a specific profession related to science diplomacy, and build their network
- Expose participants to the views and experiences of a variety of professionals who are involved in science diplomacy in different ways and across different geographies (if conducted as a series).

InsSciDE has received funding under the European Union's Horizon 2020 Research and Innovation programme (grant agreement n° 770523, 2018-2022)

Structure and Implementation

The Talks are closed meetings hosted online or in person between one invited science diplomacy 'Ally' and a group of around 5-6 participants. The small-group format is conducive to a casual and dynamic conversation, in contrast to settings such as webinars that may be limited to question-answer exchanges. A 60-minute meeting suits an online format well, while an in-person meeting could benefit from being longer.

A few suggestions on suitable contexts in which to implement Science Diplomacy Ally Talks is provided below.

- As a supplement to a training program, especially if hosted online
- As a networking activity in a conference
- As an extracurricular opportunity in a science diplomacy university course
- As a seminar series at an institution looking to build awareness of science diplomacy among its staff.

When implementing Ally Talks, it is important to manage the expectations of both the Allies and the participating Group. The Ally should have an idea of the academic and/or professional backgrounds of the Group and should be informed about how the segment is presented to those participants. The Ally should provide a short text, such as a bio or discussion prompt, that conveys the topics on which they wish to center the discussion.

Ahead of the meeting, the Group should be provided with information about the Ally (e.g. brief bio or discussion prompt) to ensure they are prepared to relevantly contribute to the conversation. It should be clear that the meeting is interactive and that the Group members are expected to play an active role in advancing the conversation.

InsSciDE has received funding under the European Union's Horizon 2020 Research and Innovation programme (grant agreement n° 770523, 2018-2022)

PILOT EXPERIENCE

The Warsaw Science Diplomacy School (WSDS) was an intensive one-week training program hosted online by the InsSciDE project in June 2020 and 2021. It was packed with analytical discussions of science diplomacy case studies, interdisciplinary teamwork, and practitioners' insights on the meaning, applications and even risks in science diplomacy. As a bonus in the months following the completion of the program, the alumni of WSDS in 2021 had the opportunity to engage directly with a more experienced or differently focused member of the science diplomacy community external to the school, in what was called "Science Diplomacy Ally Talks".

Method

The alumni received a program with the meeting times and descriptive texts of ten Science Diplomacy Ally Talks. They were invited to sign up to attend those that were most interesting and relevant to them. Over three months, the Talks were hosted through Zoom for one hour.

Results

The overall reception of the Talks was positive and the alumni who joined once were the most likely attendees in subsequent Talks. However, in some sessions there was a high rate of no-shows despite several alumni having signed up, perhaps due to many being accustomed to the non-commitment of registering for webinars. There was also a lot of fluctuation in how dynamic different sessions were. Most of the Talks were lively and far-reaching, with Group members and the Ally often exchanging emails at the end. However, if there was lack of engagement from the Group, then the Talks quickly became more like a lecture from the Ally.

To enhance the outcomes of the Talks, the organizers found it crucial to emphasize to all participants that the meeting is interactive and to urge the Group to carefully review the bio or discussion prompt before the meeting. Additionally, they provided suggestions such as to start the meeting with a quick roundtable and to mention why they chose to join that Talk. It was also important to highlight to the alumni that their participation was positively expected if they signed up for a session and did not cancel, which diminished no-show incidents.

InsSciDE has received funding under the European Union's Horizon 2020 Research and Innovation programme (grant agreement n° 770523, 2018-2022)

Examples of the Science Diplomacy Allies of WSDS21

The Allies who volunteered to participate were from diverse backgrounds and at different stages in their careers, and included a few alumni from the previous edition of WSDS. To preface the meeting to the Group, some Allies chose to submit a discussion prompt and others a short bio. A few representative examples are included below.

- *Jean-Christophe Mauduit - Lecturer in Science Diplomacy at University College London*
  An astrophysicist by training, Jean-Christophe contributed to ESA and NASA satellite missions. He was previously a Research Scholar at the American Association for the Advancement of Science in Washington, DC, and Associate Director at the Science Diplomacy Center at the Fletcher School of Law and Diplomacy (Tufts University, Boston). His research interests include science attaché networks, science diplomacy strategy, international scientific organizations and astronomy/space diplomacy. Come talk and reflect with Jean-Christophe about how these networks are built and what they bring.
- *Kleinsy Bonilla - Visiting Scholar at the University of Campinas UNICAMP (Brazil) (WSDS20 Alumna)*
  Topic - Engaging science diasporas for development: SD Perspective and the role of highly educated human resources from the Global South.
  I was born and raised in Guatemala. After I completed my undergraduate studies in Social Sciences I moved to different countries, spending nearly a decade in South Korea (including obtaining a master's and Ph.D., and working), 3 years in Chile and 4 years in Brazil. I wonder, can we remain relevant to our countries of origin while residing abroad? Different factors have motivated a significant number of highly educated human resources from the Global South to be trained/educated/employed in higher education or research institutions of scientifically advanced countries. In the past, the dominant concern with this type of mobility was the “brain-drain” phenomena, with fewer discussions about “brain-circulation” or “brain-gain”. In the proposed conversation, I would like to hear the viewpoints of the WSDS community on how SD might enhance possibilities to engage science diasporas for development by bridging countries of origin and host countries. Let's talk about policies, experiences, challenges and opportunities relevant to our times in which travel and communication might ease the engagement of

InsSciDE has received funding under the European Union's Horizon 2020 Research and Innovation programme (grant agreement n° 770523, 2018-2022)

the scientific workforce with origins in scientifically lagging countries to close global science gaps.

- *Ernesto Fernandez-Polcuch - The Representative of UNESCO in Peru*
  Ernesto is a specialist in scientific diplomacy and science, technology and innovation policy. He has a Master of Science, Technology and Society from the National University of Quilmes, Argentina. Previously, he was Head of the Section for Science Policy and Partnerships at UNESCO in Paris, and held positions in the UNESCO Regional Office of Sciences for Latin America and the Caribbean, based in Montevideo, the Office of UNESCO in Windhoek, and the UNESCO Institute of Statistics in Montreal. Before joining UNESCO, he was Technical Secretary of RICYT, the Ibero-American Network of Science and Technology Indicators, a teacher, researcher and consultant in several Latin American and Caribbean countries. He is happy to discuss career paths at the interface of science, politics and diplomacy; UNESCO's role in science diplomacy; fostering international science or science policy partnerships through IGOs; and Global North/South collaboration, specifically involving Latin America.
- *Katalin Alföldi - Policy Officer, COST Association*
  At the COST Association, Katalin leads the Global Networking and Spreading Excellence and Widening Participation tasks, which focus on openness and inclusiveness and promotes it as a unique platform for trusted R&I cooperation. Katalin started her career as member of the team conducting the screening negotiations on the Acquis Communautaire concerning environment and nature conservation between Hungary and the European Commission. She later became a Programme Committee member for subsequent Framework Programmes. Moving from Budapest to Brussels, Katalin took on assignments at the European Commission DG R&I dealing with the synergies between research and regional policies and designing the international STI cooperation strategy. Katalin successfully negotiated different council conclusions and the European Institute of Technology's seat agreement for Budapest, while she was science counsellor at the Hungarian Permanent Representation to the EU. Katalin has a Master of International Relations and Economics. Science and diplomacy have been interwoven in her career, through her engagement and facilitation of the advancement of science through diplomatic means. She considers networking an indispensable tool for successful science diplomacy and served as an 'expert' at WSDS20.

§§§

InsSciDE has received funding under the European Union's Horizon 2020 Research and Innovation programme (grant agreement n° 770523, 2018-2022)

Discussion material

InsSciDE Collection of Training Materials

InsSciDE
Inventing a shared Science Diplomacy for Europe

Strategic Objectives to Strengthen Science Diplomacy for Europe

Fägersten's Six Strategic Objectives to Strengthen Science Diplomacy for Europe for discussion

DESCRIPTION

Introduction

In the InsSciDE report on science diplomacy strategy, Björn Fägersten outlines six objectives that Europe could undertake to strengthen capacities for science diplomacy. These objectives can be used as discussion material by themselves or within the framework of a case study or a regional perspective. The below segment is an extract from a full report on science diplomacy strategy.

InsSciDE has received funding under the European Union's Horizon 2020 Research and Innovation programme (grant agreement n° 770523, 2018-2022)

What to do? Strategic objectives and practitioner recommendations

The above section analysed the relevance of science diplomacy to key European foreign policy interests, gave examples of what is already happening and reflected on the insights from science diplomacy history. Against this backdrop, what can or should the EU and its member states do to further its science diplomacy agenda[57] and enhance its contribution to European foreign policy? Existing research suggests that the EU, as a diverse but collective actor, requires three basic characteristics to strengthen itself as a strategic actor: coherence, or the ability of EU member states and institutions to work in tandem; capacities, or the material and institutional resources that enable action; and context, a permissive setting for EU policymaking.[58] This section makes suggestions on what the EU could do in relation to these basic strategic needs in order to increase the contribution of science diplomacy to the foreign policy interests discussed above. Six strategic objectives are suggested below, along with related recommendations.

1. Strengthen a free and vibrant European scientific community

- The primary objective for the EU in strengthening its science diplomacy is to safeguard a free, vibrant and outstanding scientific community that can generate excellence in scientific results as well as support EU foreign policy through science diplomacy. The Commission's 2022 Strategy for Universities states clearly that these actors "play a vital role in generating the evidence that underpins Europe's foreign and security policies, international agreements, and multilateral action".[59] A strong scientific base ensures the EU access to expertise and valuable support for all the above foreign policy goals. Investment in basic research needs to increase both at the EU level and in member states.

- Academic and scientific freedom – fundamental aspects of the functioning of the EU as well as its nascent science diplomacy – are under threat. This threat comes from efforts to root out theories and perspectives that are deemed inappropriate and from the general deterioration in liberal democratic principles in some member states. The principles of the 2020 Bonn Declaration on Freedom of Scientific Research, signed by all the EU member states, needs practical backing. European research support structures such as the EU Horizon programme must be accompanied by and linked to active measures against member state suppression of free and independent research.

[57] See point 34 of the European Council conclusions on a "Global approach to Research and Innovation: Europe's strategy for international cooperation in a changing world", 3813th meeting, 28 September 2021.

[58] On the development of the framework see Fägersten, B. (2020). "European autonomy in a changing world order". In: Bakardjieva Engelbrekt A., Bremberg N., Michalski A. and Oxelheim L. (eds), *The European Union in a Changing World Order*: Cham: Palgrave Macmillan).

[59] European Commission (2022). Communication from the Commission on a European Strategy for Universities, Brussels, 18 January.

2. Agree principles on scientific cooperation in an era of regime divergence and competition

- The geo-economic era of regime competition and rivalry in innovation and research puts the EU in a different place compared to the familiar post-Cold War position. While globalisation might not have delivered change in closed and authoritarian systems, attempts at full decoupling between democratic and authoritarian regimes would be a fruitless endeavour. In addition, full decoupling would deprive Europe of scientific progress and opportunities to influence and assemble knowledge about foreign entities. Hence, European actors must establish a middle ground between naivete (remaining open to any sort of cooperation) and decoupling, in particular for scientific cooperation with non-democratic systems.

- General principles must be further developed for academic interaction with non-democratic regimes, for example with explicit red lines on issues such as censorship and discrimination. Grey area situations will also need further elaboration and collegial discussion. Voluntary principles on funding, for example, would facilitate scientific cooperation on several of the above foreign policy goals. In particular, it would facilitate cooperation on global challenges where no state or bloc of states can manage the task alone.

- When working with partners in non-democracies, European researchers encounter challenges such as infringement of academic freedom and attempts at political influence. EU research funding instruments should increasingly finance support structures for researchers collaborating with counterparts in non-democratic countries, such as training sessions on risk management, assistance with the translation of key documents and facilitation of sharing of best practice among research and higher education institutes.[60] Further measures that research and education institutions can take, for example, on cybersecurity and partnership policies are suggested in a 2022 Commission document on tackling foreign interference.[61]

- Considering that much relevant research and research collaboration today takes place in research technology organizations (for example in the much hyped semiconductor field[62]), science parks and private-public innovation partnerships, the EU should inspire corresponding discussions and principles in this fields and not only in traditional academic environments.

[60] See Tardell, M. (2021). "Swedish experiences of research collaboration with China: Challenges and the way forward", Swedish National China Centre.

[61] European Commission (2022). Directorate-General for Research and Innovation, "Tackling R&I foreign interference", staff working document.

[62] Rühlig, T. and Kleinhans, J-P. (2022). "Should the EU be concerned about high-tech research collaboration with China? Lessons from the case of semiconductors". CHERN, available at <https://china-in-europe.net/should-the-eu-be-concerned-about-high-tech-research-collaboration-with-china-lessons-from-the-case-of-semiconductors-by-tim-ruhlig-chern-stsm-host-jan-peter-kleinhans-chern-stsm-grantee/>.

3. Foster capabilities and culture of scientific advice in foreign policymaking

- The diplomatic arm of the EU machinery – the European External Action Service (EEAS) – would benefit from a more inclusive culture of knowledge infusion. One positive recent development is the fact that the EEAS has employed a dedicated science and technology adviser since 2020. Further progress could be made by way of training modules, staff mobility schemes with academic sabbaticals for relevant staff members, a policy planning process with more openings for scientific expertise and a bureaucratic process that has the time and resources to absorb the knowledge provided by experts. The work of the European Academies Science Advice Council (EASAC) could serve as an inspiration and resource.

- The EU delegations around the world should be able to benefit from staff with the competences to build and facilitate research and innovation networks, and coordinate member state efforts where possible.[63]

- In an era of geo-economic rivalry where Europe's corporate sector is key to its foreign policy objectives, the EU should also work to spread scientific advice and knowledge beyond the governmental sector. Digital Innovation Hubs – "one-stop shops" to help organisations and companies, including small and medium-sized enterprises, take advantage and make use of new digital transformations (Artificial Intelligence, AI, digital skills and cybersecurity) by providing boot camps, traineeships, exchanges of curricula and training materials – have been one suggestion to help corporations adopt up-to-date transformative technologies and become more competitive.[64]

4. Increase cohesion of EU level efforts

- Cohesion among the various EU bodies and institutions will be a key factor in increasing foreign policy clout. This is also essential for the successful exercise of science diplomacy. One example of inadequate levels of cohesion can be found in the European Commission's new research and innovation programme, Horizon Europe. The programme uses a mission strategy to steer efforts in relation to specific goals. While some of these goals are linked to the UN Sustainable Development Goals, the links between the missions and the EUs overarching foreign policy goals are tenuous.

- For a self-styled "geopolitical Commission" aiming to learn the language of power, it is striking that international research activities are discussed in isolation from today's major political questions and rivalries. While more geopolitical considerations are included in the Global Approach to Research and Innovation strategy, further policy cohesion must mean that the parts of the Commission that deal with areas other than foreign policy address the EUs overarching

[63] For a discussion, see the forthcoming research by Pierre-Bruno Ruffini, "Relations between national science diplomacies and European science diplomacy", https://www.insscide.eu/about/case-study-pitches/article/science-diplomats-pitches, and <https://www.insscide.eu/results/publications/>.

[64] Cagnin, C., Muench, S., Scapolo, F., Störmer, E. and Vesnic-Alujevic, L. (2021). *Shaping and Securing the EU's Open Strategic Autonomy by 2040 and Beyond* (Publications Office of the European Union: Luxembourg).

international interests. In addition, general foreign and security policy strategies will also need to address the field of science diplomacy.

- One way to ensure such coherence could be the formulation of a joint agenda on Science Diplomacy by Mariya Gabriel, the Commissioner for Innovation, Research, Culture, Education and Youth, and Josep Borrell Fontelles, the Commissioner leading the work on "A Stronger Europe in the World".

- Another measure would be to designate SD focal points within relevant EEAS departments and Commission directorates. Together with the SD staff in the EU's external delegations, this group would form the internal stakeholders for European SD and elevate its role in everyday EU policymaking.

- On financing, more initiatives could be envisaged like the "Team Europe Initiative" with greater involvement from the European Investment Bank and the European Bank for Reconstruction and Development– expanding alliances on key priorities such as healthcare, infrastructure and critical technologies.

5. Increase cohesion of EU and member state efforts

- Cohesion among its disparate member states is often highlighted as a lever for the EU for managing its international relations. EU-level science diplomacy will be strengthened if it is supported rather than undercut by individual member state strategies. This requires that member states develop congruent national strategies that, at a minimum, do not conflict with common European efforts. For example, many national strategies are focused on securing national innovation goals and establishing bilateral research cooperation with third actors. Minimal coordination would ensure that these national efforts do not undermine common policies on innovation or weaken the EU's hand in relation to third parties.

- The EU should consider establishing a Science Diplomacy Coordinator, modelled on the Counter Terrorism Coordinator, that could monitor member states' activities and act as a focal point for cooperation. The coordinator should seek a stronger role for EU delegations, in cooperation with the holder of the EU presidency, to take a more central role in coordinating European science diplomacy efforts in third countries. The process for coordinating National Risk Assessments, where EU member states submit risk assessments according to a common template, could also be a guide here.

- On financing, coordinating efforts across member states could reduce disparities and fragmentation within the bloc, allowing for more cohesive development in the digital arena. In the current digital transformation, combining initiatives and pooling resources could not only reduce duplication but also lead to more efficient technical advances, notably in the cyber, quantum or AI spheres. For instance, a "quantum-web" is a genuine possibility involving coordinated efforts between EU research programmes, member states and the private sector to develop a connected network of quantum computers, simulators and sensors. Good

examples are the NIS Directive and the cyber diplomacy toolbox, which provides interoperability and a common framework for member states.

6. Leverage potential science diplomacy stakeholders

- This report has focused on the science diplomacy of the EU institutions, and to some extent its member states. This was motivated by the definition of science diplomacy as a conscious and even instrumental activity. It should be noted that other forms of interaction and cross-fertilisation between the scientific and diplomatic world can also affect science diplomacy, especially from a long-term perspective.

- The EU should therefore aim to build bridges and platforms of interaction with surrounding actors that can function as facilitators and, with time, leverage more official science diplomacy efforts. This could engage cities, NGOs, the academic world and the private sector, all of which possess power potential in this field. The new "EU Science Diplomacy Alliance" could act as a bridge or partner in this regard.[65]

- However, these surrounding stakeholders – and scholars in particular – would also need to consider their role and agenda in the science diplomacy field. As argued above, science diplomacy serves an end that is usually tied to wider foreign policy goals. The extent to which scientists and experts will want to engage in and facilitate this form of statecraft, and how this could be done while respecting their integrity, merits thorough discussion in Europe's academic environments.

[65] See https://www.science-diplomacy.eu/about/eu-science-diplomacy-alliance/.

Strategy Advice to EXCO Scenario

A scenario exercise about achieving strategic objectives to strengthen science diplomacy for Europe

EXERCISE PROMPT

Prompt: *Working together as a team, prepare a 10-minute presentation (using PPT or another visual support) responding to the following prompt. At the end of the day, the team will present this in plenary, and receive specialist feedback.*

Your assembled team of science diplomats, specialized in the area of your case study (Energy/Security – Space – Heritage – Health), has received an official request for strategic advice on progressing toward the selected objective(s) to strengthen science diplomacy for Europe.

- Relying on insights into your historical case – the understanding you have developed of actors, interests, interactions and outcomes – formulate advice for how the objective(s) could be achieved.
- This advice could outline specific field actions to be taken, the basis on which they are recommended, and particular points of vigilance. You will have the opportunity to present (10 min) your draft strategic advice to a senior practitioner in your case area, who will give you feedback and discuss with you the feasibility and practicability of your proposals (20 min).

Fägersten's Six Strategic Objectives to Strengthen SD for Europe

1. **Strengthen a free and vibrant European scientific community** – the "home base" of science is a prerequisite for successful science diplomacy.
2. **Agree principles on scientific cooperation in an era of regime divergence and competition** – a path between unfettered cooperation and scientific decoupling can be established towards relations with non-democracies.
3. **Foster capabilities and a culture of scientific advice in foreign policymaking** – the EU foreign policy machinery can be adapted to make better use of science and scientific advice.
4. **Increase cohesion of EU level efforts** – European Commission, the External Action Service and other EU actors can coordinate better on common goals.
5. **Increase the cohesion of EU and member state efforts** – coordination can be facilitated on the diverse efforts by the EU and member states.
6. **Leverage potential science diplomacy stakeholders** – bridges to and joint platforms with the full ecosystem of science diplomacy actors can be established while still respecting their different roles.

InsSciDE has received funding under the European Union's Horizon 2020 Research and Innovation programme (grant agreement n° 770523, 2018-2022)

DETAILED DESCRIPTION

Introduction

In this exercise students practice formulating advice for achieving specific strategic objectives related to science diplomacy and present it to a mock 'Executive Committee' (EXCO). It is ideally performed in a multidisciplinary and international environment in which individuals in each group contribute unique expertise and viewpoints.

The exercise is rooted in six strategic objectives outlined in InsSciDE's recommendation for European SD strategy (Fägersten) and includes the use of case studies.

Learning Objectives

- Deepen understanding of 1-2 strategic objectives for science diplomacy
- Be able to discuss how the strategic objectives apply to a case study on a related subject
- Expand thinking around the strategies and objectives at play behind SD practices
- Be able to support strategic thinking with ideas or context grasped from a historical case study (linking history to the present and future).

Materials

Materials

- Prompt and list of Fägersten's Six Strategic Objectives to Strengthen SD for Europe (hereby, 'Fägersten's Strategic Objectives') - see first page.
- Science diplomacy case studies - InsSciDE and S4D4C
    - Recorded presentations of select case studies available on InsSciDE's YouTube channel in the WSDS 21 playlist.

Optional materials

- Science diplomacy basics from the European Science Diplomacy Online Course.
- Full recommendation on European SD strategy, containing Fägersten's Strategic Objectives: 'Leveraging Science Diplomacy in an Era of Geo-Economic Rivalry Towards a European strategy'
- Recorded lectures:
    - Power, Actors and Interests of European Sci Dip - WSDS21 (Fägersten, 2021)
    - Linking Past, Present and Future inSci Dip Strategy - WSDS21 (Fägersten, 2021)
- External experts to engage with students' presentations

Details and Tips

In groups of 4-6, students study an assigned case study and discuss how it pertains to one or more of Fägersten's Strategic Objectives. Based on their discussions, students work to develop strategic advice for achieving those objectives, aimed at a real or fictional policy agency.

They should consider the interests, expectations and capacities of the policy-maker audience and exercise foresight in order to recommend the best course of action. The activity is designed to last over only a few hours and includes producing a presentation (e.g. PowerPoint), thereby entailing a time-constriction that necessitates quick and efficient coordination within the group.

Case studies

Case studies provide a foundation for the exercise. Students study the cases to foster understanding of the historical context and the landscape of actors and interests in which they are asked to craft strategic advice. The EU projects InsSciDE and S4D4C have conducted case studies on a wide range of science diplomacy topics that can be integrated into this exercise. (See link under *Materials*).

Formulating strategic advice

Formulating the advice entails considering a number of intersecting scientific, economic, political, security or other factors. Students should consolidate individual areas of expertise (genuine or attained by pre-exercise study) and harmonize across their cultural and disciplinarily norms to agree on a set of clear recommendations for strengthening SD.

Example questions to consider:

Which of Fägersten's Strategic Objectives pertain to your case study and why?
What are challenges to achieving these objectives considering the insight provided in the case study?
Who are the relevant actors that can support and coordinate the strategy?
What competing interests are at play?
What are the risks or restrictions?
What capacities or mechanisms need to be strengthened to achieve the objectives?
What evidence (scientific or historical) supports your advice?

EXCO - Advice recipient

The advice is directed at an executive committee (EXCO) of a policy-making agency. Embellish the EXCO entity with details relevant to the context of the training. It could be a fictional entity or a specific real agency with known objectives and conventions, such as UNEP or a ministry of foreign affairs.

Plenary presentations

Invite one or more subject-matter experts to listen and provide constructive feedback to the students' presentations. Alternatively, moderate a discussion with all the students in the training. Students and experts may wish to comment on the clarity of any technical information

presented, the feasibility of the proposed strategy, or the effectiveness by the group to get its message across to a policy-maker audience.

PILOT EXPERIENCE

The description of this exercise *above* has been adapted from the experience described *below* to suit a wider audience. Understanding the conditions in which this training resource was tested can help modify it according to your needs.

The exercise was conducted virtually in WSDS 2021 with a total of 24 students divided into four teams of six. Team members were diverse in geography, profession, career level and age.

The four case studies used were:
(find these and other InsSciDE cases here)

- *The role of data in global vaccination governance: a matter for health diplomacy - Anna Pichelstorfer (Team Vaccines)*
- *Constructing ITER: Reciprocity and compromise in fusion science diplomacy - Anna Åberg (Team ITER)*
- *Space diplomacy in the Cold War context: Cooperation vs. competition - Olga Dubrovina (Team Space)*
- *The workers' strike of 1963 at the German excavation of Tell Chuera - Tobias Helms (Team Heritage)*

Pilot Methodology
4 hours in total was spent on the exercise, plus prior general study.

- *Pre-exercise* Students ranked their interest in four InsSciDE case studies and were placed accordingly in a 'case study teams' prior to the program beginning. Each case study was pre-matched with two of Fägersten's Strategic Objectives.
- *Pre-exercise* Sessions preceding the exercise included:
  (see *Materials* for the relevant links)
  - Science diplomacy basics from the European Science Diplomacy Online Course.
  - Study of their case study in their teams, grasping its sequence of events and identifying actors, interests and power dynamics at play.
  - Modules on the practice of science diplomacy, strategy making in international

relations, and the notion of linking history to present and future policy decisions.

1. Fägersten's Six Strategic Objectives were presented in plenary along with the prompt. (Find in *Materials*). Each case study was pre-matched with two of the Objectives.
2. *90 min* Students were broken into two discussion groups – each group with two of the case study teams at a time – and were guided by instructors to:
    - Examine links between their case study and their strategic objectives
    - Identify the interests at play in the cases
    - Propose actors needed to implement the advice
3. *30 min* Case study teams discussed their ideas and received advice from their respective case study authors.
4. *90 min* Case study teams worked independently (without instructors) to develop their advice and create a 10 minute presentation.
5. *30 min/team* A representative from each team delivered the presentation (10 min) before a jury of external experts who served as the mock Executive Committee and the rest of the students. The external experts provided feedback on the feasibility and originality of their recommendations and the other students also commented and asked questions.

Results

Below are four example presentations created by students of WSDS 2021 during this exercise. We discuss the presentations of Team Vaccines and Team ITER in greater detail to demonstrate how they correspond to the exercise.

- Team Vaccines Presentation
- Team ITER Presentation
- Team Space Presentation
- Team Heritage Presentation

Student outcome example A – Team Vaccines

The group called Team Vaccines studied the case 'The role of data in global vaccination governance: A case for health diplomacy' by Anna Pichelstorfer. The Strategic Objectives deemed most relevant to the case were:

Objective 1: Strengthen a free and vibrant European scientific community
Objective 5: Increase cohesion of EU and member state efforts

The case study discusses the challenge of collecting and interpreting vaccine data on a global scale due to countries' differing capacities and health systems, as well as demonstrates the political power implicated in the data and its related processes. In their presentation, the team outlined actions in the field of public health that would support the two Strategic Objectives, focusing on the role of data and science communication.

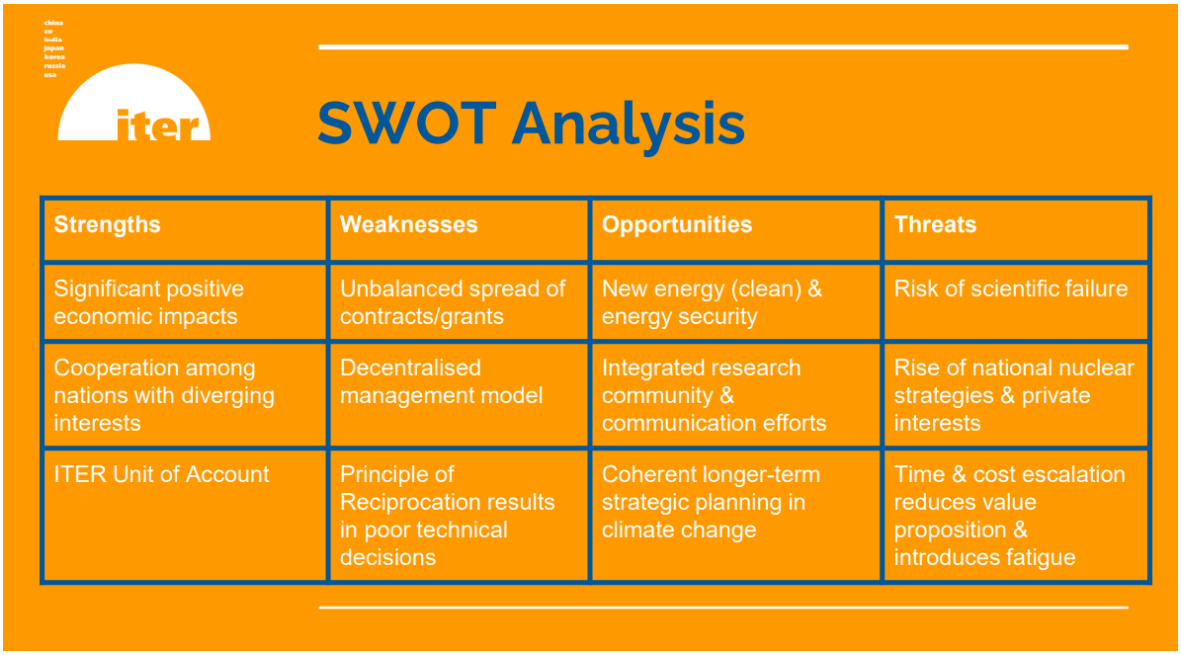
Introductory page of WSDS Team Vaccines' presentation to EXCO

Student outcome example B – Team ITER

The group called Team ITER studied the case 'Constructing ITER: Reciprocity and compromise in fusion science diplomacy' by Anna Åberg. The objectives from Fägersten's Six Strategic Objectives deemed most relevant to the case were:

> *Objective 2: Agree principles on scientific cooperation in an era of regime divergence and competition*
>
> *Objective 5: Increase cohesion of EU and member state efforts*

The case study outlines the complex negotiations that birthed the international megaproject ITER and which remain the foundation of decision making and scientific procedures between its thirty-five collaborating nations. In their advice, the team presented a SWOT analysis of ITER and its structure, on which it based recommendations for better organizing future international scientific projects.



SWOT analysis of ITER performed by WSDS Team ITER

Feedback

The participants' evaluation report from WSDS 2021 revealed that the exercise overall was well received, although there was some uncertainty among students on "the strength of links between knowledge of history and developing forward-looking strategy" (Hardy, Mays et al., 2021). A few quotes from student evaluations depict how the EXCO Strategy Advice Exercise was received:

- "We believe that combining history with strategy will help to understand the past and to better identify the current issues and set strategy goals that will lead us to find common language and cooperate for common interests. Considering history while framing the strategy is important and can enable us to better analyze the stakeholders, to create effective partnerships, and to find the right balance between competition and cooperation. Using history to understand anthropological realities and devised strategies can also help us to foster cross-cultural practical science diplomacy partnerships."
- "Seeing the four [case study teams'] very different attempts at delivering policy objectives and trying to work out where those ideas and experiences had come from was really revealing!"
- "I think the best part of today was getting to receive feedback from experts [in the EXCO Strategic Advice Exercise] and to simulate a scenario where we had to act under pressure and with little time and not so much information as we would have liked."

Challenges and possible modifications

Based on the reception of the exercise in InsSciDE's pilot program, we suggest considering the following challenges and potential tools in replicating the exercise:

- Students need to establish a firm understanding of the case studies being used.
  - ➢ Assign the case study as pre-exercise study material and ensure sufficient time for discussing the case in groups.
- Students should have some familiarity with the contemporary SD ecosystem related to their case study, including relevant actors and any major legislation.
  - ➢ Discuss the institutions and legislations mentioned in the case studies to ensure students have a general understanding of their functions.
  - ➢ Consider assigning pre-study modules from the S4D4C MOOC on European Science Diplomacy.
- *To suit more homogenous or non-expert student groups*
  - ➢ provide different background reading to each member of a group, in this way simulating the interdisciplinary and/or international aspect of the exercise.
- *To forego subject matter experts as advice recipients:*
  - ➢ students deliver their strategic advice in plenary and the floor is opened to discussion after each group's presentations.
- *To create a more specific context:*
  - ➢ Create stricter confines in which the strategic advice should apply. For instance,
  - ➢ Replace the function of the case study with presentations by experts on a specific subject matter. For instance, students learn from a lecturer about science diplomacy in the Arctic and then specific international challenge in which science, diplomacy and other sectors might intersect, such as sustainable fishing in international waters or cross-border disease outbreak control.

§§§

Cooperation & Bonding in Science Diplomacy Training

Based on successful features of Warsaw Science Diplomacy School 2020 and 2021

DESCRIPTION

Introduction

A strong science diplomacy training should foster a dynamic environment, conducive to long-term connections among participants (if not already acquainted). Based on survey responses and continued interaction among alumni, InsSciDE could conclude that this was achieved to great satisfaction in its online training, the Warsaw Science Diplomacy School (WSDS). InsSciDE has attributed it to a mix of features, comprising specific actions as well as elements to consider in the overall design of the training, discussed in this document.

The following features are detailed below, with extracts from the 'Participant Evaluation of Warsaw Science Diplomacy School 2020 and 2021'[1] to demonstrate the reception of the features in the WSDS pilot program.

- **Diverse cohorts and small group discussions**
- **Inter-level discussions (students learning from students)**
- **Disciplinary support groups**
- **Collaborative article series**
- **Social media**
- **Fun and movement breaks**

Objectives

The objectives of incorporating these features into a science diplomacy training may include to:

- Facilitate long-term and personal connections among trainees
- Build capacity to collaborate and communicate across disciplines and geographies
- Afford trainees a fun/relaxing activity

[1] Sean Hardy, Claire Mays, Ilonah Fagotin, Karolina Kyrzyzanowska, Natalia Czajkowska (2021) Participant Evaluation of InsSciDE Events: Warsaw Science Diplomacy School 2020 and 2021. Deliverable 1.5a for the H2020 InsSciDE project, submitted by European Academy of Diplomacy and Institut Symlog de France, August 2021.

InsSciDE has received funding under the European Union's Horizon 2020 Research and Innovation programme (grant agreement n° 770523, 2018-2022)

KEY FEATURES

Diverse Cohorts and Small Group Discussions

Diversity in teams and groups is generally considered to breed more creativity and dynamic engagements. This is particularly important in science diplomacy training due to the practice itself being characterized by frequent cross-professional and international interactions.

If the training is open to applications, the selection process should ensure that there is a good variety of academic and professional backgrounds and nationalities among selected candidates. Some fields to consider ensuring are represented include: STEM, Environmental sciences, Public health and medicine, Diplomacy, Government, International relations, Humanities, Social sciences, Science and Technology Studies (STS), Business, Social partners.

Further, the lecturers of the program should represent a diversity of perspectives. Consider inviting practitioners of science diplomacy from a variety of regions, as well as social sciences researchers specialized in science diplomacy (e.g. STS, international relations).

WSDS Pilot Experience

InsSciDE was proud to have convened broadly interdisciplinary and international groups of trainees for its two editions of WSDS, reflecting the diverse field of science diplomacy itself. This diversity was key to fostering a dynamic environment and thought-provoking discussions.

InsSciDE's participant evaluations of WSDS strongly indicated that the cohort composition in the training was very important for a quality learning experience.

> *"Many participants praised the time spent in breakout discussions and small group work. Dozens of comments highlighted the value of unstructured discussion time to delve into the case studies (with and without the guiding presence of the Case Study Author). The collaborative mindset was praised. The diversity of team compositions was largely appreciated, with participants' survey replies frequently highlighting the interdisciplinary and international nature of the WSDS cohorts."*

Social Media

Social media can serve as a powerful tool for fostering bonds in a science diplomacy training program, most potently in online training. Twitter, Facebook and LinkedIn can each serve a role

in building a community feeling in the training cohort and afford participants a platform to easily interact.

Consider inviting admitted participants to share their social media information before the program, which could be compiled and shared with the cohort. In this way, participants can start interacting and getting to know each other early, facilitating engagement and cooperation once the program starts.

WSDS Pilot Experience

Due to the WSDS program being entirely online, social media became an integral means for participants to chat and bond 'outside the classroom'. Twitter successfully drummed up enthusiasm ahead of the training, during and after. A closed Facebook group for WSDS participants and alumni has been used to plan in-person meet ups at conferences, solicit professional advice and launch new joint projects. Many former trainees also connected with each other on LinkedIn.

A compilation of tweets from WSDS 2020 demonstrates the energy on social media before, during and after the training program.

Bonding through Support Groups

The support groups are a place to discuss more personal ambitions for the training program and in the field science diplomacy. Trainees should be grouped by something they have in common, such as academic background, professional position or the region that they are from, and given a few prompts to discuss.

Consider arranging a first support group meeting early in the program. Prompts might include:

> *What attracted you to a SD summer school? What is your personal position as you enter the school – are you a science diplomat, do you want to become one? How do you feel about what you learned so far? Were you surprised or were your thoughts confirmed? What do you hope to gain from the training program during this [week] and beyond?*

In the final support group meeting, prompts might include:

> *In the first meeting, you expressed what you were looking for in the school. Did you find it this week? What did you learn about [insert training program's]? What did you learn about using basic research to address strategic challenges? What did you learn from your fellow students? How will you stay in touch with your fellow students? How can you collaborate in the future with your fellow students? Will that be useful? What was particularly useful from the perspective of your field/discipline? What was missing?*

WSDS Pilot Experience

The diverse cohort of WSDS 2021 was divided into 'disciplinary groups', grouped by the disciplinary backgrounds of the trainees, which met on the first and last day of the program to discuss a series of prompts. One trainees gave the following representative quote in the evaluative survey:

"I really enjoyed being able to share my impressions of the week with the others from this [shared interest:"disciplinary"] group – you created an excellent group of people with similar desires/needs/perspectives, etc., that allowed us to really talk together."

Student Article Series

Collaborating on an article series allows trainees to take initiative outside the structured training program to define their own ideas about science diplomacy in conversation with fellow trainees.

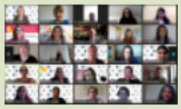
WSDS Pilot Experience

After the completion of WSDS, students were invited to submit co-authored articles for publication on InsSciDE's website. About half of all trainees followed up on this opportunity, yielding seven collaborative articles in the series across the two cohorts. The articles elaborated on the discussions held in small groups during the training, furthering both the discussions and connections established.

WSDS21 Student Takes: Space diplomacy then and (...)

WSDS21 Student Takes: ITER - SD success or failure?

WSDS20 Student Takes: Scramble for Africa



WSDS20 Student Takes: Articles by the alumni

WSDS21 Student Takes: SD against neocolonialism in (...)

WSDS20 Student Takes: Science Diplomacy and the Litter (...)

WSDS20 Student Takes: Towards a Joint Approach for EU (...)

Inter-level Discussions (students learning from students)

The process of learning from peers can be a highly enriching aspect in a science diplomacy training. Peer-to-peer exchange could be facilitated through teamwork exercises or by prompts that encourage trainees to draw from their own knowledge or experiences to dissect discussion materials. Having a diverse cohort of trainees enhances the benefits of such exchanges.

WSDS Pilot Experience

"In terms of learning from our fellow students, [it] has been a really great learning [experience] from all of us. It has been really interesting to see what everyone else thinks and what everyone is doing. What we have heard from a lot of people from different nations and different universities has been precious. Putting on our European hat [during the strategy development exercise] was a really revealing experience for all nonEuropean members of the group".

"When you put all these people together with very specialized knowledge and a common interest, that's when the magic happens. That was the best part of this course by far."

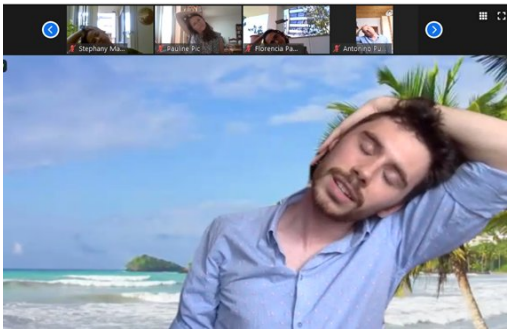
Fun and Movement Breaks

Fun and movement breaks may be incorporated into a program to create a relaxed and open atmosphere. They could include ice breakers such as 'Two truths and a lie' or 'Speed dating', or group activities such as a short guided stretching segment or breathing exercises.

WSDS Pilot Experience

WSDS incorporated fun and movement exercises in each day of the online program as a means to lighten the mood in the midst of otherwise serious topics, as well as to help trainees regain focus and ease tension during the long days in front of the computer. Exercises included: learning the choreography to the A majority of trainees ranked the segments with a 4 or 5 out of 5.

Sean Hardy leads WSDS 2020 in a relaxing stretching workshop.



§§§

Curriculum Prototype for Science Diplomacy Training

Based on Warsaw Science Diplomacy School Detailed Course Content

INTRODUCTION

The Curriculum Prototype for SD Training can be used to replicate elements of InsSciDE's pilot program Warsaw Science Diplomacy School (WSDS), which was hosted in June 2020 and with enhancements in June 2021. Key program documents from both editions illuminate how InsSciDE ran the 5-day virtual training program and the lessons from the first edition that prompted modifications in the second.

WSDS 2021 MATERIALS

Program Schedule 2021 (Schedule of Events)
https://www.science-diplomacy.eu/wp-content/uploads/2022/05/WSDS21_Schedule-of-Events.pdf

Detailed Course Content 2021
https://www.science-diplomacy.eu/wp-content/uploads/2022/05/WSDS21_Detailed-Course-Content.pdf

Class of 2021 Booklet (extract; including student diversity overview)
https://www.science-diplomacy.eu/wp-content/uploads/2022/05/WSDS21_Class-of-2021-Booklet_Extract-only.pdf

Pub Night Flyer
https://www.science-diplomacy.eu/wp-content/uploads/2022/05/WSDS21_Pub-Night-Flyer.pdf

InsSciDE has received funding under the European Union's Horizon 2020 Research and Innovation programme (grant agreement n° 770523, 2018-2022)

WSDS 2020 MATERIALS

Brochure of case studies and student diversity 2020
https://www.science-diplomacy.eu/wp-content/uploads/2022/05/WSDS20_Brochure-of-case-studies-and-student-diversity.pdf

Program Schedule 2020
https://www.science-diplomacy.eu/wp-content/uploads/2022/05/WSDS20_Participants-Program-Schedule.pdf

Detailed Course Content 2020
https://www.science-diplomacy.eu/wp-content/uploads/2022/05/WSDS20_Brochure-of-case-studies-and-student-diversity.pdf

Class of 2020 Booklet (extract from full document; including participant profile examples)
https://www.science-diplomacy.eu/wp-content/uploads/2022/06/WSDS20_Class-of-2020-Booklet_Extract-only.pdf

PILOT EXPERIENCE & DETAILS

The Warsaw Science Diplomacy School (WSDS) was a flagship program of the InsSciDE project, co-organized by seven of its international project partners: the European Academy of Diplomacy (EAD), UiT The Arctic University of Norway, Centre national de la recherche scientifique (CNRS), Swedish Institute of International Affairs (UI), Symlog and UNESCO.

Hosted online 22-26 June 2020 and 21-25 June 2021, the training embodied InsSciDE founding principles of historical connections and interdisciplinary dialogue, while fostering an intimate and constructive environment in a Zoom-intensive week of debate, analysis and fun.

Application Process
The application process was competitive and required students to submit thoughtful essays addressing ways to foster science diplomacy, balance interests and resolve coinciding tensions.

Pre-Study
With limited 'live time', students completed pre-study assignments ahead of the WSDS week, including modules from the European Science Diplomacy MOOC (by 'sister project' S4D4C), recommended readings and a warm-up session with their 'case study team' and case study author.

Curriculum Variety

Case studies by InsSciDE historians were placed at the heart of open discussions and collaboration in small student teams. The cases were analysed in 'case study teams' and served as a base in developing strategic and critical thinking around science, foreign policy and SD. In parallel, the week was enriched with specialist panels on practical elements for being a successful science diplomat, the variety of forms of SD and the (less commonly discussed) risk, safety and security aspects of the practice.

DAY-BY-DAY OVERVIEW

The below summary of each day of WSDS 2021 complements the program documents above with a sense of the tone and spirit of the sessions.

DAY 1 – Introductions, Open Session and Practitioners' Panel

WSDS kicked off with a round of introductions and icebreakers, an open session with themes of power and geopolitical transitions, and a panel of practitioners testifying to the joys, challenges and daily life of being a science diplomat.

At the end of the day, students were placed in groups according to common professional interests and discussed their ambitions in SD and what they hoped to gain from WSDS21. In the evening, we hosted a Pub Quiz on the avatar-based social platform Gather (winners: The SciDip Rockers!).

DAY 2 – Historical case studies of SD

On Day 2, InsSciDE researchers presented the four historical cases of SD to be placed at the heart of WSDS (part of the 24 case studies that underscore the InsSciDE project).

The cases – on topics of nuclear energy research, space diplomacy, archaeological research and vaccine diplomacy – spurred first discussions on the constellation of actors, interests and obstacles involved in implicit or explicit SD.

In the afternoon, members of the EU Science Diplomacy Alliance and the new Norway-EU Science Diplomacy Network discussed different avenues through which we can pursue SD or develop related resources, such as multi-stakeholder fora, university partnerships, education initiatives, or networks like the ones they represented.

DAY 3 – Tensions and Interests; Risk, Safety and Security

The day started with framing SD as a strategic instrumentalization of science for foreign policy purposes. The presentation highlighted SD as a powerful tool of statecraft and the power dynamics that underlie research funding and scientific progress, setting the stage for a broader theme of risk, safety and security in the afternoon.

Teams regrouped to examine their case studies through this narrower foreign policy lens and zoomed in on the tensions and interests that underlie the actions observed in their cases.

The afternoon afforded students exclusive insights from the frontlines of political decision-making and negotiations in two 'off-the-record' sessions with high-level scientists and science diplomats.

DAY 4 – Strategy and deliverable presentations

The fourth and most intensive day consisted largely of small-group discussions and interdisciplinary teamwork, culminating in plenary presentations by each of the student teams on a deliverable of hypothetical SD strategic advice.

A morning lecture introduced fundamentals of strategy as well as the major impacts/applications of history on the present – such as a source of knowledge or as motivation to mobilize. The students learned about six EU foreign policy objectives where SD might be a component of the EU's strategic approach and were tasked with consolidating advise on pursuing 1-2 of the objectives in a context related to their case studies. After group 'coaching', further discussion with their case study authors, and independent team work, the four teams presented their advice – relating to ITER, space, archaeology, and health – and received feedback from subject matter experts.

Day 5 – Evaluations and Graduation

Before the graduation ceremony commenced, the students were once again placed in their 'disciplinary groups' from the first day, this time tasked with reflecting on WSDS21 from the rear-view mirror, as well as in view of leveraging the experience in the future. When groups returned to plenary, their feedback conveyed the training had illuminated unknown aspects of SD and sometimes changed perspectives on students' own professional contexts. Cohort diversity emerged as one of the most valuable elements of the training and there was a great determination to pursue further collaboration within the WSDS network.

§§§

What makes for good SD training? Lessons from WSDS Evaluations

Based on feedback collected from trainees in Warsaw Science Diplomacy School 2020 and 2021

INTRODUCTION

Warsaw Science Diplomacy School (WSDS), organized by the InsSciDE project, delivered in-depth training in science diplomacy with a historical and strategic framing, for two cohorts in June 2020 and 2021. As a pilot program, InsSciDE also sought to evaluate the strengths and weaknesses of WSDS teaching methods and activities, as seen through the eyes of the trainees.

The below excerpts from the WSDS evaluative report are based on daily student surveys during the program, social media posts and verbal feedback in a debrief on the last day of WSDS. The summary portrays the overall reception of the program, highlights its most valued features and provides direct quotes from student feedback.

For a deeper view, see the full report here.

To be cited as:
Sean Hardy, Claire Mays, Ilonah Fagotin, Karolina Kyrzyzanowska, Natalia Czajkowska (2021) Participant Evaluation of InsSciDE Events: Warsaw Science Diplomacy School 2020 and 2021. Deliverable 1.5a for the H2020 InsSciDE project, submitted by European Academy of Diplomacy and Institut Symlog de France, August 2021.

PARTICIPANTS' EXPECTATIONS

Responses to the question "What do you want to gain from this week of WSDS?" could be sorted into four categories:

- Gain further general knowledge of Science Diplomacy.
- Network with science diplomats.
- Assess the state of international science cooperation, considering a European perspective.
- Develop a toolbox to include in their everyday practice of Science Diplomacy.

The majority of students expressed that their expectations were met across the five days — with many stating that their expectations were in fact exceeded. The feeling of gaining a fuller view of science diplomacy, and a sense of inspiration for the future, can be seen in comments like these:

> *"I definitely expanded my knowledge about SD this week. I loved the historical perspective." (WSDS20)*
>
> *"The best moment was sharing our impressions and how everyone lived this great experience with the hope of staying connected in the future." (WSDS21)*

RESULTS

Teamwork Under Diversity

Many participants praised the time spent in breakout discussions and small group work. Dozens of comments highlighted the value of unstructured discussion time to delve into the case studies. The diversity of team compositions was largely appreciated, with participants' survey replies frequently highlighting the interdisciplinary and international nature of the WSDS cohorts.

High-Value Features of WSDS

Below are some of the features that emerged as fundamental to the positive views formed of the school by participants, seconded by instructors and organizers as high-value deliveries by WSDS.

Complex vision of Science Diplomacy: Many facets of science diplomacy were acknowledged by the curriculum – not just that it is desirable, powerful or necessary, but that it can also be dangerous and competitive.

> *"There is no room for being naive in science diplomacy. Too many interests in play…" (WSDS21)*

Multidisciplinarity stood out as a rare experience and the strongest point of the summer school.

> *"It was amazing to see all these different cases but also see similarities among them. Truly interdisciplinary" (WSDS21)*
>
> *"When you put all these people together with very specialized knowledge and a common interest, that's when the magic happens. That was the best part of this course by far." (WSDS20)*

Significant potential for future collaboration is seen, with ideas ranging from social networks to an alumni association to a 'women in science' development, to co-authoring articles ('WSDS Student Takes') and implementing a shared resources platform.

Learning About History, Strategy and Science Diplomacy

InsSciDE intended to pilot an approach to science diplomacy education using "history combined with strategy". At the outset some students were apprehensive, but by the end of the school, the student teams – on the strength of their diversity, intelligence, and tendency to lean into discovery – had formed a strong understanding of how these twin tools might serve science diplomacy:

> *"Many of us in our group expressed that we wanted to learn more about the mechanism of science diplomacy and how learning from historical cases could help us develop constructive strategies. […] Making this connection proved very valuable for us." (WSDS21)*

Reception of the Online Delivery Format

Health restrictions forced both the 2020 and 2021 editions of WSDS online, a challenge to the crucial science diplomacy element of networking but also an opportunity to discover and evaluate more accessible and environmentally friendly ways to engage.

Both WSDS20 and WSDS21 students saluted the fact that the remote format enabled the participation of students who might otherwise have experienced significant difficulty or expense traveling.

Reinforced bonding activities – e.g. breakout group discussions, short breaks with guided meditation, dance or yoga, and after-hours 'Pub Nights' – were a critical component of the school's online success.

> *"[What stood out to me was] how much everyone managed to connect despite the virtual setting" (WSDS21)*

While participants longed for face-to-face socializing, they nonetheless created bonds, a group practice, and a network whose future potential appears strong:

> *"I appreciated that all group discussions had led to somewhat similar desires/plans for future cooperation. That goes to show how events such as this summer school can boost the collaborative spirit." (WSDS21)*

For more insights into results of the WSDS curriculum (from strategy exercises to the role of social media to finding a good course rhythm), read the full report here.

§§§