JOURNAL OF LATIN AMERICAN SCIENCES AND CULTURE Vol. 4 – SPECIAL ISSUE - 2022 Universidad Privada del Valle – Bolivia https://doi.org/10.52428/27888991.v4SpecialIssue.21 THE BOLIVIAN DECLARATION ON SCIENCE AND CLIMATE LITERACY

November the 27th, 2021



PREAMBLE

Science has long been a tool to develop bilateral and multilateral relationships. However, the definition and applications of science literacy have broadened considerably in recent years. This conceptual broadening coincides with the growing understanding that science and technology underpin so many of the challenges and opportunities that current societies face, whether as a driver or a potential solution. Integrating science into foreign policy to not only advance national interests but also to tackle shared global challenges is an appropriate response.

In this context, the Andean Road Countries for Science and Technology and UNIVALLE organized the 1st Annual Meeting on Scientific Literacy 2021: A prerequisite for stimulating climate change engagement on November the 27th. At this event, experts from around the world discussed the present and future of climate literacy, its fundamental role in addressing global challenges, and the requirements to harness its full potential in the Latin American region and beyond.

As a result of these fruitful discussions, this "Bolivia Declaration on Science and Climate Literacy" was signed by a group of high-level experts who contributed to the conference. It proclaims a common vision of science literacy in the future, emphasizes the benefits science literacy can bring to tackling the global challenges of our time, and outlines the principles needed to foster science diplomacy worldwide.

VISION

The "Bolivian Declaration on Science Literacy" aims to foster agreement and raise awareness about the need to strengthen science literacy strategies and practices worldwide for the support of universal scientific and democratic values. These strategies are required to suitably include science and technology as key dimensions of foreign policy and international relationships at different levels. This confluence of interests must be in the benefit of both the scientific endeavour as well as legitimate broader political and societal objectives.

Science Literacy, in the context of this Declaration, is understood as a series of practices at the intersection of science, technology, and foreign policy. The renewed interest in scientific literacy comes in response to identified challenges at the interface of science and foreign policy, where a greater scientific voice could both add value to bi- and multilateral discussions and decisions about our shared global concerns. Joint science literacy objectives are possible where actors converge around such common challenges. Therefore, science literacy goes beyond international science collaboration, as it tackles interests that go beyond the scientific ones and may directly or indirectly serve to advance sustainable development goals. The first annual meeting highlighted the growing importance of science literacy on a global level. One important role for science diplomacy, in this regard, is to build bridges between science, technology, and innovation practices, national and regional interests, as well as global challenges.

We firmly believe that:

- Science literacy is often not fully exploited at all levels
- More explicit science literacy strategies at national and supranational levels would allow for a more effective alignment of interests and more efficient coordination of resources.

BENEFITS OF SCIENCE DIPLOMACY

We firmly believe that the potential of science literacy is yet to be fully realized. It includes:

- Endeavours to address global challenges (climate change). Science and technology are global enterprises. Together with other tools, science literacy can facilitate the identification of common global challenges. Coordinated scientific efforts can help to address these global challenges. The relationship between global challenges and scientific practices goes both ways. Efforts to achieve the "Sustainable Development Goals" are an example of how global challenge-related policy-making and scientific research must be in constant dialogue.
- More productive and sustainable international relations at multilateral and bilateral levels owing to their interaction with science and technology. The precondition for this is that scientific activities are considered but not appropriated by broader political rationales.
- Evidence-informed foreign policy supported by science and technology, aiming at substantive and resilient international agreements, treaties, and policies.

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- Better conditions for scientific activities due to the contribution of foreign policy agendas. Literacy, with the support of the scientific community, has a particular role to play in the implementation of larger scientific initiatives and projects (e.g., research infrastructures, joint programs, etc.).
- Improved interfaces between science and public policies. Science literacy can contribute to eliminating cultural, sectoral, and knowledge barriers between different actors such as policymakers, researchers, and civil society.

PRINCIPLES TO FOSTER SCIENCE LITERACY WORLDWIDE

- Value for citizens: governments, diplomats, and researchers are encouraged to acknowledge and demonstrate science literacy as a fundamental and universal tool to improve international relations in general.
- **Methodological diversity:** consider explicit and implicit types of science literacy This involves acknowledging that not all relevant science literacy practices are labelled as such. Putting the science literacy label on a given project, program or policy is a strategic choice.
- **Demonstrable impact:** the potential positive effects of science literacy need to be measured and recognized. At the same time, there may be unintended side effects that need to be acknowledged and assessed. Public policies not relating to science literacy may also have unintended effects in the realm of science literacy.
- **Evidence-informed:** in foreign affairs-related policies in relevant areas. This knowledge can be content-related (e.g., scientific evidence on climate change, global inequality, cyber security), context-related (e.g., knowledge about a specific innovation system), or process-related (e.g., evaluative knowledge on the effects and the outcome of science literacy interventions).
- **Collaboration and inclusion**: science literacy is a multi-actor effort in which diplomats, scientists, and science managers as well as other non-state actors can have a role and can contribute to its deployment. This applies at the local, regional, national, and international levels. This innovative model brings new governance and coordination mechanisms that need to be managed in dialogue with all stakeholders.
- **Capacity building:** All stakeholders involved in science diplomacy will benefit from exchange and suitable capacity-building activities. Therefore, cutting-edge, interdisciplinary, intergenerational, interactive training modules are needed. These will enable public officials and scientists to cooperate in an efficient way, strengthening future science literacy. This capacity-building runs in parallel to the need to establish new science literacy positions such as science advisors in foreign ministries, scientific staff at Embassies, etc., which will also foster new career paths for science diplomacy professionals.
- **Independence of science:** science is an extremely useful tool for addressing global challenges and for improving international relationships if it is not distorted by ideological goals

The declaration is intending a truly global reach. If you would like to sign it as well, just send your name, affiliation, and motivation to sign to **<u>editorial@journalasc.org</u>**. The full list of signatories will be updated continuously.