Interactive Workbook on Science Communication

Gilbert Ahamer
https://orcid.org/0000-0003-2140-7654
Austrian Academy of Sciences, Austria

BACKGROUND

The *organisations* involved in the following cases include secondary schools, universities, university clusters, transnational university partnerships, international environmental NGOs, and the European Union's external policy. These organisations range from public to private and from idealistic to pragmatic. All of them plan to "change the world" and for that target they undertake to *exchange views and perspectives* among the stakeholders concerned. This paper approaches to find answers to the specific set of questions through cases of international collaborative educational projects.

In this article, the term "*workbook*" means a written text that is used for a series of (online) workshops during which the authentic opinion and value systems of the partners are formed into an *administrative guideline* and into *practical suggestions* for concrete future work.

The goal and justification of the chapter consists in drawing attention to data scientists inhowfar their research findings can be conveyed to a larger public, thus justifying received research grants.

1. INTRODUCTION

1.1 Setting the Frame

This article proposes a structured set of draft "Guidelines on science communication" that were elaborated by the author in the framework of Component 4 within the European Union (EU) Twinning project entitled "Supporting inter-sectoral collaboration possibilities between Research and Industry" (GE 18 ENI OT 02 19) during the years 2020-2021 in a dialogic process between Twinning beneficiary (the Shota Rustaveli National Science Foundation of Georgia SRNSFG) and the Twinning team comprised of several science-related EU member state organisations[1].

According to the Terms of Reference (ToR, 2020), "the overall objective of the project is to help Georgian Institutions to strengthen Georgia's Science, Technology and Innovation (STI) system. This should be achieved by identifying and addressing the main priorities and challenges the system is confronted with and the best ways of approaching these challenges with the aim of ensuring an interdisciplinary approach, collaborative research and promoting evidence-based policy implementation in line with the EU-Georgia Association Agreement (AA)."

DOI: 10.4018/978-1-7998-9220-5.ch037

1.2 Key Procedural Decisions

The following seven fundamental decisions were made by the author as a grand orientation for dialogic cooperation on science communication:

1. Procedurally and didactically, the intention of this workbook is to place its user (reader) into an *active role* which practically means to fill in the empty boxes (shown in the following figures).
2. In practice, the addressee (or client, in this case SRNSFG) will prepare their actual authentic science communication program based on *own initiative* and own responsibility, while the present workbook facilitates this task by preparing the structure, format, and logic model.
3. This workbook may be adapted further along the dialogic process described in section 21.
4. This is a concrete work plan and work strategy. It should help SRNSFG staff to produce their own strategic program on science communication (SC).
5. The underlying reason for science communication is to inform the public about the achievements and chances provided by the science sector for society. Such information should be most effectively transported to the various stakeholder groups within society, which are graphically represented by the logo on the cover page.
6. Science is seen as a key agent for societal innovation and progress, thus promoting Georgia's development on all cultural, societal, political and economic levels.
7. The economic need for science communication arises from the need for effectively making use of those funds which society invests into society. The resulting role of science as innovator and generator of workplaces should be facilitated by allowing the broad public to take proactive roles, e.g., as founders of start-ups and SMEs (Small and Medium Enterprises). Such communication therefore triggers new action – in case it is successful.

1.3 The Dialogic Procedure

The following procedures lead to the development of the guidelines:

- "Science communication guidelines" are *no standard product* in science administration, for which a clear definition or clear requirements would exist, nor are there striking examples in other national science administrations. SC guidelines have to be freshly invented anyhow.
- Based on the literature analyses performed for this project, and based on earlier science communication workshops, the involved stakeholders cooperatively develop a mindset for "science communication guidelines". Because of inexistant standards or norms, **this product is converted into a process**.
- After completion of draft guidelines until July 2021, such a *dialogic process* was started in autumn 2021 by which the draft guidelines were further discussed, adapted and reshaped for the needs of the Georgian beneficiaries.

According to Figure 1, the dialogic procedure includes bi-weekly micro-workshops (meaning 2-hour online working meetings with one partner from each side, EU and Georgia) and mainly serves for the inculturation of the guidelines and the explanation of its dialogic-procedural spirit into a formerly hierarchical "command-and-control" work atmosphere.

As preparation for every micro-workshop, a section of the draft guidelines is sent to the beneficiary.