

Creating a Manual for Young Scientists

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Training Resource



Tools to Introduce Themes
Tools for Discussion, Reflection
and Learning: Quick Tools
Tools for Discussion, Reflection
and Learning: Deep Dives

Research Insights



Making Sense of Science
Evaluating & Promoting Science
Communication Quality Online
Barriers to & Opportunities for
Reaching Audiences

Competence Framework



Picture of the World
Professional Norms & Roles
Working Knowledge

Required Prior Knowledge



Solid science communication knowledge and
experiences in scientific working and practi-
cal science communication needed.

Description

In recent years, public engagement has developed into an important activity of scientific work and a professional demand for academic careers. However, we also know from previous research on public engagement – also conducted within RETHINK – that scientists do not always feel well-equipped for engaging with society. At the same time, only some scientists have opportunities to take part in science communication trainings to develop their competences.

Against this background, the task is to develop a manual for young scientists that gives them guidance for their own science communication and public engagement activities. When conducting this task, students themselves can thus become 'trainers' for science communication and take up the important role of spreading science communication quality and promoting professionalism.

As outlined above, developing science communication competences should not be restricted to skills and working knowledge – although these are important pillars of science communication and training, respectively. The manual should thus help scientists to understand the complexities of the current science communication landscape and explain core concepts (e.g., audiences, platforms), principles (e.g., quality standards, dialogue and interactivity) and strategies (e.g., framing). Moreover, the manual could also address questions of effectiveness and evaluation. Aspects should be based on evidence of science communication research.

To plan their manual, students should envision scientists' needs and use literature on public engagement motives and demands. Depending on the time available, the preparation could also include a short research phase in which students conduct exploratory interviews with a small number of scientists to learn about their needs to help the students tailor the manual.

The manual can be developed individually or in small groups. Moreover, the group can agree on a joint structure and share responsibilities for the different parts. For the presentation of results, it would be interesting to invite young scientists to discuss the manual and give feedback.

Manual for Young Scientists

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Learning Objectives

- Applying science communication theory and evidence
- Putting oneself in the position of young scientists who are expected to or want to engage with the public
- Developing writing skills and own science communication competences
- Learning from other perspectives, esp. in interaction with scientists

Technical Requirements and Preparation

- Optional: access to literature (e.g., Web of Science license or comparable)
- Space (e.g., digital) for group work.
- Equipment for presentation (notebooks, whiteboards etc.)

Sample Schedule

30–60 minutes	Introduction
Approx. 2 hours	Joint development of manual structure, pot. division of responsibilities for chapters
	Optional: exploratory interviews with scientists to analyse needs
Approx. 15–20 hours	Literature review
15–20 hours	Writing the manual
30 minutes per participant/ group	Presentation and discussion of manuals in class
Approx. 2 hours	Optional: discussion with scientists
60–90 minutes	Wrap-up and conclusion