

Science-oriented: Good science communication follows the standards of good scientific practice as well as the relevant communication guidelines and codices (cf. e.g., [2]). When presenting one's own research results, it describes the publication status (e.g., unpublished, preprint, peer-reviewed paper) and the nature and degree of scientific evidence, identifies uncertainties and limitations and dispenses with exaggeration and disproportion. It discloses conflicts of interest and names sources, making these accessible as far as possible. In the process, one's own results should be positioned within the overall state of research, especially if they contradict important results produced by other research groups in significant aspects.

Audience-specific: Good science communication is geared to the needs of the audience. It is understandable for the respective target group and may also present the facts in a simplified and entertaining way. It takes society's interest in current topics into account and opposes false information. When issuing public statements, researchers at TU Dortmund University make it clear to the audience in which role they are speaking (e.g., expert, stakeholder, private person) (cf. [1]).

Use of various formats: Good science communication can succeed by using a variety of formats. Participatory measures at local level can give smaller groups an insight into science. To reach a mass audience, interviews with experts in journalistic media are a promising instrument. With regard to digital alternatives, such as social media channels, the ratio of time and cost to outreach is a criterion that should not be neglected (cf. [3]). Here, science communication may capitalize more on partnerships with multipliers. TU Dortmund University also encourages participation in open source and open science infrastructures (cf. [4]).

Considering the impact: Good science communication faces the critical debate and engages in dialog. It sees its role especially in enlightening people about scientific facts and the current state of knowledge as well as the underlying research methods and processes. Political demands are legitimate in this context, but they need to be clearly distinguished from scientific statements. According to the "Rules of Good Scientific Practice at TU Dortmund University", serious breaches of the core principles of good scientific communication towards the public can be sanctioned (cf. [6]).

Assured support: TU Dortmund University fosters good science communication, its research-based further development and the teaching of corresponding ethical principles through study, training and support measures offered by science and administration. Communication work is acknowledged, among other things, by means of a university-wide media monitoring system (press review) and a communication prize, which is being introduced alongside the existing teaching and research awards. TU Dortmund University also advises and supports researchers who, as a consequence of their statements as scientific experts, must fear becoming victims of public attacks (shitstorms, hate speech, threats, etc.) or have been exposed to such reactions. Public or external science communication is always voluntary, never obligatory (cf. [4]).

References

[1] Acatech – Deutsche Akademie der Technikwissenschaften/Deutsche Akademie der Wissenschaften Leopoldina/Union der deutschen Akademien der Wissenschaften: Social Media und digitale Wissenschaftskommunikation. Analyse und Empfehlungen zum Umgang mit Chancen und Risiken in der Demokratie, München 2017.

www.leopoldina.org/uploads/tx_leopublication/2017_Stellungnahme_WOeM_web.pdf

[2] Wissenschaft im Dialog (Hrsg.): Leitlinien zur guten Wissenschafts-PR, 2018.

www.wissenschaft-im-dialog.de/fileadmin/user_upload/Ueber_uns/Gut_Siggen/Dokumente/Leitlinien_zur_guten_Wissenschafts-PR.pdf

[3] P. Weingart, H. Wormer, A. Wenninger, R.F. Hüttl (Hrsg.): Perspektiven der Wissenschaftskommunikation im digitalen Zeitalter, 2017.

www.acatech.de/publikation/perspektiven-der-wissenschaftskommunikation-im-digitalen-zeitalter/download-pdf/?lang=de

[4] Peter Weingart et al.: Gute Wissenschaftskommunikation in der digitalen Welt – politische, ökonomische, technische und regulatorische Rahmenbedingungen ihrer Qualitätssicherung, in: Berlin-Brandenburgische Akademie der Wissenschaften, Wissenschaftspolitik im Dialog 19/2022.

www.bbaw.de/files-bbaw/publikationen/wissenschaftspolitik_im_dialog/BBAW_Wissenschaftspolitik-Dialog_19_2022.pdf

[5] Wissenschaftsrat (Hrsg.): Positionspapier Wissenschaftskommunikation, 2021.

www.wissenschaftsrat.de/download/2021/9367-21.pdf?__blob=publicationFile&v=9

[6] Regeln guter wissenschaftlicher Praxis der TU Dortmund vom 12.12.2019

https://www.tu-dortmund.de/storages/tu_website/Referat_1/Dokumente___Ordnungen/2020_Regeln_guter_wissenschaftlicher_Praxis.pdf