

ENJOI



ENJOI - ENgagement and JOurnalism
Innovation for Outstanding Open Science
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PRINCIPLES, STANDARDS AND INDICATORS (SPIs) FOR AN OUTSTANDING OPEN SCIENCE COMMUNICATION

"Principles, standards and indicators (SPIs) should be at the core of a solid ethical and deontological approach to science communication and journalism."



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WHAT ARE THE ENJOI SPIs ?

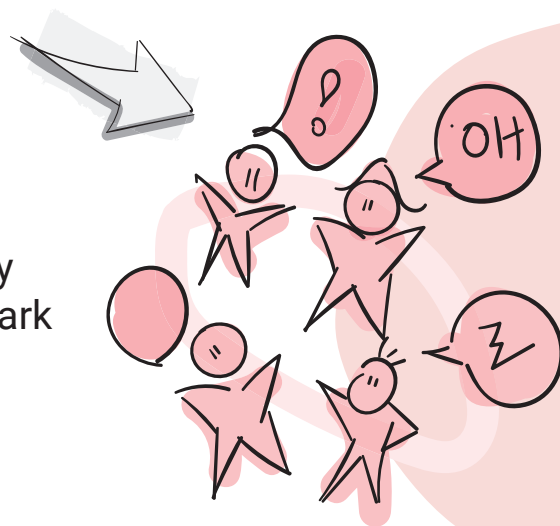


PRINCIPLES

Concepts that serve as foundations and guide the attitude and the conduct of science communicators and journalists. Principles shape the entire communication working framework and ecosystem.

STANDARDS

Reference models that are recognised and used as general rules to measure quality, extent and value in science communication. They need to be widely recognised and accepted as a benchmark or reference point, representing a set of criteria to ensure consistency and reliability in a certain field. There are technical and behavioural standards in communication as in other sectors.



INDICATORS

Indicators: measurable or observable factors, quantitative or qualitative, that help monitor the road towards the application of the principles and standards.



ENJOI'S PRINCIPLES



ETHICS AND DEONTOLOGY

INTEGRITY

Science journalism and communication must be factual, transparent, and respectful of the public. Journalists and their sources should act utterly independent from any external pressure, political or institutional. Communicators should always be transparent if they act on behalf of an institution or any other entity. Conflicts of interest should always be declared. Complete transparency can be fostered by publishing a code of ethics and transparency on the media's website or public profile.

RIGOUR AND COMPLEXITY

Rigour, accuracy, complexity, and uncertainty are innate features of science. They should also be fundamental characteristics of science communication. This applies to any output, from the quick post on social media to the more articulate long-form article or interactive cross-media. To support the development of scientific literacy and nurture critical thinking, science communication should focus more on the process of science-making and not only on the results. Scientific results should never be presented as abiding pieces of truth nor exploited to raise false hopes or expectations. The use of open data and open science allows for cross-verification by an enlarged community, facilitates the understanding of the scientific method and contributes to building trust.

RELEVANCE

The priority of science communication and journalism is to respond to the audience's needs and enable users to incorporate their scientific citizenship rights fully. This can range from cultivating knowledge and enjoying basic science research and its results in looking for solutions, alternatives, and possible applications to face small and big everyday challenges. The first goal of science communication should be to enable citizens to discern among alternatives and make informed choices, particularly on topics that have a substantial impact on their lives as individuals or communities, such as the environmental and global health crises or technological developments and impacts.



ENJOI'S PRINCIPLES



METHODOLOGY AND PRACTICE

ENGAGEMENT

Engagement should not merely be limited to collecting feedback and appreciation for marketing reasons. On the contrary, earnest engagement can play a role in the whole life cycle of information, informing and improving it. It can even become part of new sustainability models in independent science communication and journalism. Various methodologies and practices enable communicators and journalists to connect with people's information needs at the global and local levels and including non-western and indigenous perspectives and voices. Such a deep engagement can help to build a genuine collaborative framework with the public and influence the information agenda. At the same time, engagement should never become a justification for bending science communication to populism and oversimplification.

SOURCES

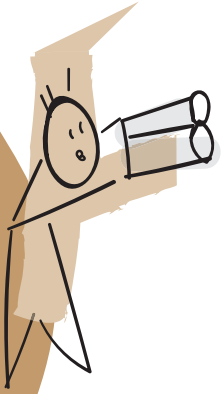
Science journalism always requires multiple independent and diverse sources, clearly stated and traceable. Particularly on controversial topics, the multiplicity of sources is needed for the communication to be in the public interest. Choosing different experts and voices is functional to reduce the echo chamber and filter bubble effects, where confirmation bias can negatively impact the value of information and hamper critical thinking. Sources should always be protected if and when in a situation of risk.

DIVERSITY AND INCLUSION

Diversity is the best peaceful weapon against polarisation and discrimination. Science communication and journalism should thrive to include voices, perspectives and contributions from different demographics, cultures, and psychographics, with special care to gender and diversity. The digital environment brings new opportunities, but algorithms, AI tools, and metrics can also be associated with biases and amplify discrepancies and inequalities. Responsible communication considers the social, philosophical and legal aspects entwined with these innovations, not just the technological ones. Adopting the lens of intersectionality helps to understand the combination of causes that might create concrete obstacles for people to access science in different contexts. The contemporary science communication challenge, even within the European region, requires recognising the influence of our colonial past on the current structure and dynamics of the scientific ecosystem and valorising non-Western only stories, voices, and perspectives, with particular attention to avoiding post-colonial narratives and attitudes.



ENJOI'S PRINCIPLES



IN THE PUBLIC INTEREST

KNOW YOUR AUDIENCE

There is no general public in the contemporary globalised and digitalised society anymore. Audiences are diverse, fragmented, and connected by different interests, political views, education, needs, ages, languages and purposes. Mapping the niches, listening to and cultivating audiences through diverse tools and methodologies is a crucial asset for journalists and science communicators. Understanding public concerns is pivotal to building trust with readers and users.

ACCESSIBILITY

Science communication should not solely target science enthusiasts and people with previous science knowledge. On the contrary, science information is even more crucial for citizens who, despite not having any science education, are called to partake in health, environmental, and technological decisions. Special care should then be given to ensuring that scientific information is fully accessible to individuals from less science-educated, hesitant or disadvantaged groups.

IMPACT

Science communication and journalism are relevant and valuable if and when they significantly impact the public at different levels. The impact can result in various outcomes, from raising a basic level of awareness to fostering a more complex and proactive level of actions, individual or collective, promoting beneficial behaviours, changes and societal transformations.

ENJOI'S STANDARDS



ETHICS AND DEONTOLOGY



- To become familiar with the way the science ecosystem works produces and validates the knowledge
- To nurture and adopt a critical and sceptical attitude towards all sources, including primary ones, verifying independently any piece of information - i.e., to be critical friends of science and not cheerleaders
- To foster collaboration and not competitiveness with the potential sources
- To avoid partisan coverage or false balance
- To be representative of the current debate on controversial issues in terms of proportions and weights of the diverse positions within the scientific community
- To embrace complexity and uncertainty and incorporate them into the final product
- To foster objectivity, when feasible, but even more transparency, mainly when covering controversial issues or dealing with risk communication
- To describe the historical, political, social and economic framework in a transparent and trustworthy fashion to connect science with society
- To detail and make available the methodology used to validate the reported data and information and to craft the communication output



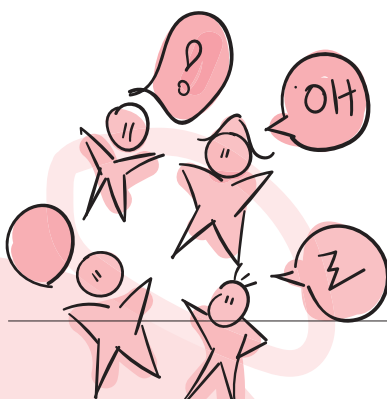
ENJOI'S STANDARDS



METHODOLOGY AND PRACTICE



- To create conditions for collaborative efforts between scientists, citizen scientists, journalists and communicators from the inception of a reporting project or communication strategy
- To give voice to stakeholders close to the treated issue who can offer a close and direct perspective
- To know your beat: journalists and communicators gain familiarity with the topic they are covering, particularly when complex and/or controversial, to avoid misinforming, being misled or even manipulated
- To choose diverse sources (in terms of age, sex, gender, origin, status and career stage), giving the appropriate recognition to young and less famous protagonists
- To involve independent fact-checkers and/or qualified experts in the validation process of the collected information, avoiding always resolving to the usual ones
- To foster a two-way dialogue to establish a loyal community around the reporting/communication project, adopting a range of tools to maintain a regular, periodical, correct conversation
- To verify every piece of information and source, making them re-traceable while applying all security measures for sources at risk
- To declare any potential conflict of interest of the sources
- To use preferentially open sources and open science to enable access to the original information



ENJOI'S STANDARDS



IN THE PUBLIC INTEREST



- To select and use tools to better segment the audience, describing the personas detailing their information needs
- To involve a diverse multidisciplinary and multi-expertise team in the design and production process
- To make science communication more reflective of the current emergent society rather than the traditional, patriarchal one that has shaped science and its communication for decades
- To craft stories that are representative and related to the target audience, to enhance cognitive and emotional engagement
- To avoid jargon as well as oversimplification, particularly when discussing technical issues and data or when discussing complex or risk-related topics
- To use formats, language and layouts, as well as any narrative expedient, adjusted to the selected type of audience
- To include links or other clear indications to allow access to data, sources or any other critical piece of information
- To take special care when using data visualisations to make sure they are appropriately designed to facilitate comprehension and to avoid merely esthetical use of data
- To reduce digital oblivion, facilitating online permanence and access to relevant content also in the long term



ENJOI'S INDICATORS



- Number, diversity and variety of sources (expertise, background, perspectives but also age, gender, culture)
- Clear description and traceability of the sources, with an explicit track record of their competence and expertise related to the topic
- Inclusion of non-western voices and perspectives
- Number of external independent sources to discuss results and data coming from a primary source with direct involvement
- Use of articles and papers published in authoritative journals
- Explicit mention and explanation of the reason for it if the source is a pre-print
- Declaration about the conflict of interest
- Presence of a transparency code



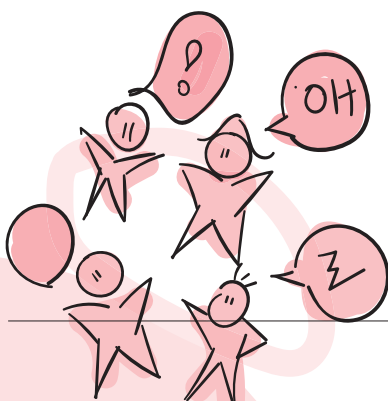
ENJOI'S INDICATORS



METHODOLOGY AND PRACTICE



- Link/reference to facts, data and publications used in the communication
- Use of open data and open science when available
- The originality of the content (not mere re-circulation of press releases or other news)
- Quality and correctness of the language (absence/presence of emotional, opinion-skewed, inappropriate, offensive expressions)
- Use of graphics, data visualisation and other creative formats to allow diverse fruition modes
- Description of the methodology adopted to craft the communication product
- Explicit recognition of scientists' contribution when the output results from a collaborative effort
- Use of analytics tools and other quantitative measurements to understand demographics, psychographics, geographical and cultural segmentation of the users
- Length of time the readers/viewers/listeners spend on a piece of information
- Measurement of the audience's comprehension (with qualitative and quantitative tools)



ENJOI'S INDICATORS



IN THE PUBLIC INTEREST



- Relatedness of the topic to the audience of the media/platform/channel
- Degree of interactivity permitted to the audience
- Engagement with younger readers/users
- The composition, in terms of diversity, backgrounds and sets of expertise, of the team of designers and producers of content
- Number of people/communities responding to a call for action
- Efficacy of the conversion funnel - number of readers/viewers who decide to become followers, subscribers, members of a media/profile/page
- Measurable change in individual and/or community behaviours and attitudes
- The social and political debate raised by the communication output
- Scientific research inspired by the engagement with a community (concerned citizens, citizen scientists, patients, activists etc.)
- Change at policy, funding or legislative level, locally, nationally or even internationally, concretely connected with the publication

