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REVIEW

Bridging the gap between scientists and the public: “Science v. Story”

Reviewed Book

Bloomfield, E. F. (2024).
Science v. Story: Narrative Strategies for Science Communicators.
University of California Press

Reviewed by

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Abstract

Emma Frances Bloomfield’s *Science v. Story: Narrative Strategies for Science Communicators*, presents ways to improve science communication in the face of declining public trust. Bloomfield’s work highlights the power of narrative, demonstrating how anti-science movements have effectively leveraged storytelling to popularize their messages. If scientists adopt narrative strategies, they can bridge the gap between the scholarly community and the public and make complex information more accessible and relatable. Bloomfield’s approach provides a roadmap for navigating the complexities of science communication in an era where many people are swayed more by personal connection than credibility or facts.

Keywords

Diversity, equity, inclusion and accessibility in science communication; Public engagement with science and technology; Science communication: theory and models

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Everyone whose job includes public communication has been wracking their brains to figure out why so many of our communication tactics aren't working. The public reaction to COVID-19 was like Klieg lights on our inadequacies when it comes to communicating about science, and the November 2024 U.S. presidential election highlighted that communications failures are deep, complex and not limited to science. The communications methods many of us learned, practiced and taught for decades simply don't work anymore. Even when audiences hear messages from scientists or other experts, they are less likely to do what the scientist or expert wants or expects them to do. Now, we're scrambling to figure out why — and what to do. Emma Frances Bloomfield's book, *Science v. Story: Narrative Strategies for Science Communicators*, provides a starting point and evidence-based guidance.

As Bloomfield documents, the trend against science began long before COVID-19, yet universities, government agencies and private sector experts were slow to recognize their opportunity to adopt some of the narrative tactics that opponents used so well.

Using four topics as case studies — climate change, vaccine hesitancy, evolution and Covid-19, Bloomfield analyzes the tactics that contributed to successful communications. In many instances, people who promoted unproven, anti-science or even conspiracy theories were more effective at persuading the public than esteemed scientists. Bloomfield attributes this to the use of storytelling tactics that make information more digestible and the proponents more approachable. For example, scientists cited numbers and other data to assure parents that children's vaccines were safe, while anti-vaccine activists connected with audiences using stories about children that were frequently dramatic and often personal. By telling a story, their words drew their audience and connected better than the "just-the-facts" approach traditionally used by many scholars and science communicators. Even when scientists or physicians attempted to point out when anti-vaccine arguments were based on Andrew Wakefield's fraudulent research, those facts and data were unpersuasive. People are more easily swayed by stories about people than recitations of facts and data.

"Stories can help bridge gaps between the technical sphere of science and scientists and the public sphere of general audiences", writes Bloomfield. "My goal is not to abandon or compromise the accuracy of scientific information, but to adapt technical information for public audiences using storytelling features… [A]ll of us can use storytelling to increase intersphere engagement and scientific collaboration."

To put her proposed approach into practice, Bloomfield suggests mapping science communication onto what she calls a "narrative web". This structure helps determine the key elements of a story, such as time span, location, actions and characters, so that a communicator or other expert can craft a narrative appropriate to the specific situation and audience. She also places a premium on identifying the best storytellers, because some audiences will connect better with a source who has a personal connection that they share, while others would question the motivation of a communicator or expert with such a personal connection. In many instances, choosing different storytellers for different audiences may be more effective than choosing a single expert, especially when many in the audience may be skeptics.

This approach may be uncomfortable for scientists whose lifetime work has focused on clear-eyed, objective reporting of observations, data and calculations. However, Bloomfield is persuasive about why narratives are effective and consistent both with accurate science communication and the history of human communication. She provides a clear framework

and diagrams that can be used to craft effective narratives and identify important elements that too often are omitted in scholarly reports.

The narrative structure is a reasonable response to the crisis facing science communicators in the present era. Even though recent surveys suggest public trust of science has slightly recovered from its deep decline in 2020 and 2021, fewer than half of Americans consider scientists good communicators, according to a Pew Research Center survey conducted in October 2024.[1] As many of us remember well, many people turned to sometimes self-proclaimed experts who told simpler stories and crafted persuasive narratives when the world was faced with confusing and sometimes conflicting "science" about the novel coronavirus. Whether these "experts" had scientific information or credibility mattered less. The story of Covid-19 was being written in real-time, and frightened or confused individuals often preferred the "choose your own adventure" story instead of one guided by scientific rigor.

Although Bloomfield's proposal that scientists should routinely adopt storytelling techniques applies globally, the idea is even more critical for American scientists. With the new U.S. president naming people associated with minority science or anti-science points of view to senior roles in health and science policy, scientists working in state and local agencies, academic institutions and the private sector must step up to communicate even more on topics where the federal government may be absent or taking alternative positions. And, they must be more effective. This means using storytelling and other tactics to better connect with their audiences and convey important information.

Using this approach could help science communicators recognize when their story may be too abstract for the audience. It also could encourage scientists to engage more directly with audiences, building on some of the person-to-person interactions on social media that some scientists conducted during the pandemic and since then. Although Bloomfield cautions that she still values true scientific experts, she says that scientists must also get more comfortable with non-scientist communicators. Effective public communication requires much greater diversity among the people who "speak for science", as she puts it. She also notes obstacles to storytelling in science. Among them, universities generally value public communication less than academic publications when considering promotion or tenure.

Anyone who recognizes the value of public understanding of science would benefit from considering Bloomfield's approach and adopting some of her tactics. *Science v. Story* has both practical methodologies and ways to analyze what works — and what doesn't. We know that scientists must become better communicators. Bloomfield's book is a roadmap towards this essential destination.

1. https://www.pewresearch.org/science/2024/11/14/public-trust-in-scientists-and-views-on-their-role-in-policymaking/.

About the author

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