



Balancing practice and research: a framework for strategic science communication

Reviewed Book

BESLEY, J. C. AND DUDO, A. (2022).
STRATEGIC SCIENCE COMMUNICATION: A GUIDE TO SETTING THE RIGHT
OBJECTIVES FOR MORE EFFECTIVE PUBLIC ENGAGEMENT.
BALTIMORE, MD, U.S.A.: JOHNS HOPKINS UNIVERSITY PRESS

Reviewed by

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Abstract

In *Strategic Science Communication: A Guide to Setting the Right Objectives for More Effective Public Engagement*, authors John Besley and Anthony Dudo recognize the existing divide between practice and research in science communication and work to bridge this gap. The authors admirably balance actionable information for practitioners and the theoretical literatures underpinning them. Both of the book's intended audiences, practitioners and researchers, can glean informative insight from its pages. The text focuses on 12 communication objectives that research suggests are at the core of effective science communication and each chapter is written using straightforward language that makes the book accessible for newcomers to the discipline. For the time-pressed science communication practitioner, each chapter includes a summary with driving questions that relate to implementation of the tactic covered in that chapter. For scholars in science communication, the chapters are good starting points for deeper examination of the related literature. Throughout the book, the authors acknowledge that the strategic communication of science is a significant challenge, one that is not to be taken lightly and can, and should, be evidence-based.

Keywords

Professionalism, professional development and training in science communication; Public engagement with science and technology; Science and media

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Science communication researchers and the community of practitioners and trainers in North America have generally operated independently of each other. While the broader scientific community has increasingly recognized the

importance of communication, science communication scholars have continued to publish research in journals that rarely reach beyond disciplinary silos. Meanwhile, practitioners and trainers are faced with multiple challenges, such as finding research that is relevant to their day-to-day work and scholarship that is inaccessible behind journal paywalls.

In *Strategic Science Communication: A Guide to Setting the Right Objectives for More Effective Public Engagement*, authors John Besley and Anthony Dudo recognize this divide and make a much-needed link between the practice of and training in science communication, and the research that impacts those activities. Throughout the book, the authors balance actionable information for practitioners and the theoretical literatures underpinning them — and they do so admirably. Both of the book's intended audiences, practitioners (into which I will, for brevity, also categorize trainers) and researchers, can glean informative insight from its pages.

Of course, no single volume can be deeply instructive for researchers *and* serve practitioners equally well, but the literatures reviewed in each chapter are wide and offer a great starting point for learning more about each of the theoretical foundations covered. It is clear that the authors have years of experience in science communication and have thoroughly done their research in writing this book; they draw from scholarship not only in our discipline but also from a diversity of adjacent ones.

In writing about strategic science communication, with its goals, objectives, and tactics, the authors practice what they preach; their own strategy is made explicit in the introduction of the book. The text focuses on 12 communication objectives, ranging from trustworthiness objectives (e.g., conveying warmth and willingness to listen) to message framing and emotions, which scholarship suggests are at the core of effective science communication and each chapter is written using straightforward language that makes the book accessible for newcomers to the discipline. Nevertheless, the articulation of the objectives and theories that inform them remain valuable to seasoned veterans in science communication.

The authors are also mindful not to oversell the idea of strategic science communication as a panacea to society's challenges; they clearly identify differences between long- and short-term changes that one might expect from implementing tactics that seek to achieve each of the communication objectives.

For the time-pressed science communication practitioner, each chapter includes a summary with driving questions that relate to implementation of the tactic covered in that chapter. The summary also includes questions that encourage practitioners to consider how best to evaluate the effectiveness of their chosen tactic. The book also draws on data collected by the authors about scientists' perceptions on communication tactics and objectives. Relying on these data benefits the authors' arguments but is also a point of critique; not all science communicators are scientists, after all. Nevertheless, these data are a productive starting point for trainers who work with scientists to improve their communication skills.

For scholars in science communication, the chapters are good starting points for deeper examination of the related literature. The authors are careful to highlight fruitful areas of research and gaps in our empirical knowledge that future work

might fill. For example, in chapter six, which discusses signaling shared values between communicators and their audiences, they point out that we do not have empirical data on how audiences' attitudes and perceptions might be affected if scientists and other communicators prioritize highlighting similarities between their own values and that of their audiences or indicating respect for their audiences' values.

The final chapter of the book is a call for empirical evidence that furthers our understanding of how various communication tactics affect specific objectives. The authors also call out the kinds of scholarship in which science communication researchers have been engaged, which, while typically strongly grounded in theory, often lack practical application. It is clear that we need more "translational" scholarship that can support science communication practice and training. Importantly, Besley and Dudo acknowledge that the strategic communication of science is a significant challenge, one that is not to be taken lightly and can, and should, be evidence-based.

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