

REVIEW

Effective Science Communication – A practical guide to surviving as a scientist

Reviewed Book

Illingworth, S. and Allen, G. (2024).

Effective Science Communication – A practical guide to surviving as a scientist.

Bristol, U.K.: IOP Publishing Ltd.

Reviewed by

Elizabeth Stevenson

Abstract

Scientists in academia, particularly early career researchers, are required to master a multitude of practices in a higher education context, often learning on the job by a process of incidental osmosis rather than structured training. For example, success in writing grant proposals, presenting and networking at conferences, journal publication, teaching, engaging with publics ‘beyond the ivory tower’, and demonstrating the ‘impact’ of research are essential skills to master to progress an academic career. Training and support in these areas can often be fragmented and/or dependent on good fortune with respect to suitable mentors.

Keywords

Professionalism, professional development and training in science communication

Received: 6th August 2024

Accepted: 27th August 2024

Published: 30th September 2024

Effective Science Communication – A practical guide to surviving as a scientist, by Sam Illingworth and Grant Allen provides much-needed information and advice for scientists in one volume. The book covers a range of communication-related practices required in academia; each chapter provides key information, insight, exercises to consolidate learning and further reading together with observations from the authors' own experiences. Each chapter begins with an intriguing quote and cartoons which add a humorous element.

Chapters 2, 3 and 4 focus on communication practices within the academic context, such as publishing in academic journals, writing grant proposals, and presenting at conferences. Chapter 5 focuses on various formats and contexts for science communication with a range of publics. Chapter 6 provides valuable advice for scientists working with media professionals in radio, television and newspapers. Chapter 7 focuses on establishing an online presence. Chapter 8 provides fresh perspectives on the challenging process of engaging with policy processes and highlights the importance of demonstrating the 'impact' of research.

Chapter 9 is a new addition to the book and offers a comprehensive introduction to teaching in higher education, invaluable to an early career academic. Chapter 10 focuses on additional skills required in a university context, including understanding research integrity, promoting diversity, time management, networking and career planning. This chapter also includes a personal account of burnout and recovery in an academic context.

The third edition of this book has significant new content. Threaded throughout the book are potential impacts and challenges of generative AI for both teaching and science communication practice. The shifting landscape following COVID-19 and the rise in the use of digital tools, together with additional, more nuanced coverage with respect to diversity and under-represented groups, are relevant additions.

One of the strengths of this book is the additional guidance provided by the authors from their personal experiences, giving invaluable insight into how to manage the 'highs and lows' of an academic career together with excellent practical advice for different situations and contexts. The new chapter on teaching is a particular highlight and condenses many key principles and ideas about teaching in higher education into succinct yet informative guidance.

The book would be an invaluable addition to any early career scientist's bookshelf as it provides easy-to-digest and insightful information about the many different types of tasks to be undertaken in the role from authors with 'lived experience' of the challenges and successes in an academic career. It could be viewed as a 'handbook' for the early-career researcher. The book may also be a useful vehicle for science communication students to gain insight into the role of the scientist in academia, in addition to gaining an overview of science communication practices more generally. There are an increasing number of roles for science communicators/public engagement practitioners in university settings. This book provides insight into the life of scientists in academia, especially those who wish to play a proactive role in public engagement with science.

About the author

Elizabeth Stevenson (PhD University of Edinburgh) is a Reader at the University of Edinburgh and Programme Director for both on-campus and online MSc in Science Communication and Public Engagement at the University of Edinburgh. She has experience of teaching both chemistry and science communication in higher education and was initially a practitioner in science communication before developing a teaching role.

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How to cite

Stevenson, E. (2024). 'Effective Science Communication — A practical guide to surviving as a scientist'. *JCOM* 23(06), R01. <https://doi.org/10.22323/2.23060701>.



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