

Book Review

Kirchoff, B. (2021). *Presenting Science Concisely*. CAB International. J. Wagner, Illustrator. (130 pp., paperback \$30.00; ebook or PDF \$25.00)

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Bruce Kirchoff has offered an enormously useful book for students in the sciences, their faculty mentors and supervisors, and communication center practitioners. Written in a style that is both conversational and knowledgeably detailed, the book urges the scientific community to tell its stories better. Kirchoff notes that our current moment is one of instant gratification, where we seek quick answers to complex problems and often turn to social media to confirm our beliefs, instead of grappling with hard-earned scientific and empirical truths. An accomplished biologist who studies plant morphology as well as a self-described storyteller and teacher of storytellers, Kirchoff is also a faculty fellow in the University Speaking Center at the University of North Carolina at Greensboro.

In order to bring about better truth-telling, Kirchoff asks scientists to tap into their artistic imaginations, thinking of their work in terms of narratives and stories. Drawing on Heath & Heath's (2007) *Made to Stick* and Olson's (2020) *The Narrative Gym*, Kirchoff walks readers through a wealth of examples illustrating how to present scientific research in three- and five-act theatrical structures (Yorke, 2014), as well as an And-But-Therefore Model that focuses on existing knowledge, conflicting evidence, hypotheses, and conclusions. Clever, whimsical illustrations by Jon Wagner make the text colorful and enjoyable to read.

Communication centers will benefit from having *Presenting Science Concisely* on hand as a reference for working with science communicators as well as for purposes of staff training. The chapters are short, practical, and readable. Bookended by chapters on stories/narrative structure and audience, the body of the book is organized around scientific presentation genres including 3-minute presentations, elevator pitches, longer formats, and poster presentations. The book can be read as a conceptual whole or referred to when scientists and other communicators encounter various speaking situations and contexts.

The examples used span a range of scientific topics that will be interesting for scientists and non-scientists alike, including a study of ancient stromatolites, the pharmacology of pain, restoration of coastal habitats, and the origins of Stonehenge. Readers are encouraged to think about how to adapt these topics to audiences that might include technical experts in the discipline, scientific professionals, non-scientists, the general public, and potential employers and funding agencies. Considerations are also given for how to speak with and in front of journalists, policymakers, decision-makers, and eminent figures in the field. The focus on audience resonates with the work that communication centers do to boost speakers' discursive repertoire so that they can operate effectively in diverse

personal, public, and professional settings.

While Kirchoff provides loads of concrete advice about narrative structure, visual aid, and delivery, the critical payoff is that the author also provides the *whys* behind the choices we might make as communicators, whether self-identified scientists or not. A chapter about posters and poster presentations, for example, discusses the benefits and drawbacks of design templates and is followed by a chapter that analyzes eye-tracking data from ©EyeQuant heat-mapping technology to track the first moments of a viewer's gaze when observing various scientific posters. Readers can see how viewers might lose the central point by getting lost in too much data, for instance, or find it difficult to see the most relevant results among gratuitous graphs and figures. Posters should attract the viewers' attention, provide a back drop for oral presentation, and present results clearly enough to stand on their own. Kirchoff brilliantly explains not just *how* but *why*.

Novice communicators often rely on templates or presentation outlines without thinking critically, or rhetorically, about the most effective ways of reaching an audience in a particular context or situation. This is where communication centers can enter the fold. When working with scientific communicators--and speakers from across the disciplines--we can be better versed and more equipped to encourage storytelling that is creative and unique to the research being presented. Rather than handing out a template, we can have a rich conversation about the scientific process, data collection, results, and implications so that speakers can step into their own shoes as effective tellers of stories about truth.

Presenting Science Concisely also includes activities that could be done in classes and workshop settings, not only for individuals and small groups working on scientific presentations, but also for training communication center student staff members. Activities that put scientific projects into 3- and 5-act narratives or the And-But-Therefore model will build the confidence of tutors and peer-consultants who sometimes feel intimidated by scientific jargon. In turn, scientists will come to realize that effective audience adaptation does not mean watering down the science but rather putting it into a narrative format that will pique listeners' curiosities and become more memorable. Because ultimately, the implications for stronger scientific communication cannot be overstated: In the midst of a global pandemic, climate emergency, and rampant misinformation, the truth needs once and for all to win and hold our collective attention.