Resources for teaching writing

There are innumerable resources out there about how to write, how to teach writing, and the particulars of science writing. Here are a few that I've found most useful, with some explanation of why.

Most inspiring

Zinsser, W., 1988, Writing to Learn: New York, Harper & Row, Publishers, 256 p.

When I first decided to teach a senior seminar focused on writing, this is the first book I read. Zinsser's more famous book is On Writing Well, which is also excellent, but Writing to Learn was exactly the point I wanted to make in my teaching. Being able to write about something means that you have learned it, and my goal in the course was to demonstrate that being able to communicate well to others is the only way that science gets done.

Gottschalk, K., and Hjortshoj, K., 2003, The Elements of Teaching Writing: A Resource for Instructors in All Disciplines: Boston, MA, Bedfor/St. Martin's, 180 p.

This is a very useful book for getting started actually *teaching* about writing. It covers a variety of ways of grading, making assignments, and avoiding common pitfalls.

Things I have my students read

Montgomery, S.L., 2003, The Chicago Guide to Communicating Science: Chicago, IL, University of Chicago Press, 239 p.

This is the main text I use in my senior seminar writing class. Fortuitously, Montogmery has a background in geology, so many of the examples are from the geosciences. I find this book the most tolerable of the "how to write" types of books, and his tone is engaging. I supplement this with real examples from the literature.

Carpi, A.; Egger, A.E.; and Kuldell, N.H., 2008, "Scientific Communication: Understanding Scientific Journals and Articles," *Visionlearning* Vol. POS-1 (9) http://www.visionlearning.com/library/module_viewer.php?mid=158

Egger, A.E. and Carpi, A., 2008, "Scientific Communication: Utilizing the Scientific Literature," *Visionlearning* Vol. POS-2 (7) http://www.visionlearning.com/library/module_viewer.php?mid=173

Carpi, A.; Egger, A.E.; and Kuldell, N.H., 2009, "Scientific Communication: Peer Review," *Visionlearning* Vol. POS-2 (2) http://www.visionlearning.com/library/module_viewer.php?mid=159

Egger, A.E. and Carpi, A., 2008, "Data: Using Graphs and Visual Data," *Visionlearning* Vol. POS-1 (4) http://www.visionlearning.com/library/module_viewer.php?mid=156

These short modules available for free online cover some basic concepts – you might think your students already know them, but they probably don't. I use these at all levels, from intro courses to more advanced.

Gopen, G., and Swan, J., 1990, *The Science of Scientific Writing: If the reader is to grasp what the writer means, the writer must understand what the reader needs*: American Scientist, v. 78, p. 550-558.

This article from American Scientist has become a classic. The authors include an exercise you can do with your students: they take a nearly incomprehensible paragraph of a scientific journal article and thoroughly *why* it is so difficult, then reconstruct something that is easier to read.

Blum, D., Knudson, M., and Henig, R.M., 2006, A Field Guide for Science Writers: The Official Guide of the National Association of Science Writers, Oxford University Press, USA.

This book is geared towards science journalists, but there is one chapter on writing about technology that applies to everyone, especially beginning scientists who are learning to make analogies and uncover how labs and equipment work.

Claerbout, J.F., 1995, *A scrutiny of the introduction*: Stanford, CA: http://sepwww.stanford.edu/sep/prof/Intro.html

Landes, K.K., 1951, *A scrutiny of the abstract*: Bulletin of the American Association of Petroleum Geologists, v. 35.

—, 1966, *A scrutiny of the abstract, II*: Bulletin of the American Association of Petroleum Geologists, v. 50, p. 1992.

These three pieces are short, sweet, and immensely helpful in writing abstracts and introductions.

Additional books/resources I use occasionally and find useful

Truss, L., 2004, Eats, Shoots & Leaves: The Zero Tolerance Approach to Punctuation, Gotham, 209 p.

I love this book. It makes me laugh, and Truss explains in a very engaging and entertaining way why it is worth paying attention to grammar and punctuation.

Williams, J.M., and Colomb, G.G., 2010, Style: Lessons in Clarity and Grace: Chicago, IL, University of Chicago Press 288 p.

This is as close as I come to using a real "manual of style", and it is by the authors of the Chicago Manual of Style.