

Tips for Writing Assignments

Help Students Learn How to Write

- Assign and discuss *The Science of Scientific Writing*
 - Emphasize what readers need:
 - Context
 - To be reminded at the beginning of a sentence or paragraph about what has come before
 - To be led into new, exciting material
- Present a mini-lecture on writing
 - Point out aspects of geoscience writing that may be less familiar
 - When to use past, present, future with regards to geologic time, published articles, collected data, rock formations, ...
 - How to cite references in the text
 - How to label and caption figures and tables
 - What goes into the various sections of a research article
 - Be prepared to address student questions on use of first person and third person
 - Be prepared to address student questions on use of active and passive writing
- Provide students opportunities to **practice** geoscience writing
 - Consider short (<250 word) writing that students might do before, during, or after a lecture
 - Present the main point of an article/reading assignment with supporting evidence
 - Explain a concept to a hypothetical audience
 - Write a caption for a figure, or one paragraph that explains the significance of a figure or table
 - Summarize observations/ interpret geologic history/pose questions based on an image
 - Consider breaking a larger paper into components (outline, intro, figure captions...)
- Provide students opportunities to **reflect** on their writing
 - Beginning of course: *What are your strengths as a writer? What would you like to improve in your writing?*
 - After one or more assignments: *If you had one more day, how would you improve your writing?*
 - End of course: *How has your writing improved? What do you want to continue to work on?*

It does not matter how pleased an author might be to have converted all the right data into sentences and paragraphs; it matters only whether a large majority of the reading audience accurately perceives what the author had in mind.

Gopen and Swan

Thanks, Rachel! This is the first time anyone has taught me how to write, not just corrected what I turned in.

A grateful junior

Carefully Craft Writing Assignments

- Write well-defined assignments that tie to course learning goals
- Consider assignments that relate to writing done in the geosciences
 - Reports, web pages, blog entries, proposals, poster presentations, articles ...
- Provide students with the evaluation criteria

Provide Relevant and Timely Feedback

- Consider peer review for early drafts
- Short individual conferences (< 15') may take less effort & time than writing extensive comments
- A rubric with a few key comments may help towards providing a timely and fair evaluation.

References

Bates, R. L., Adkins-Heljeson, M. D., and Buchanan, R.C., editors, 2004. **Geowriting: A Guide to Writing, Editing, and Printing in Earth Science**, Fifth Revised Edition. American Geological Institute, 100 pp.

Bean, J., Drenk, D., and Lee, F., 1982. **Microtheme Strategies for Developing Cognitive Skills**, p. 27-38 in *New Directions for Teaching and Learning: Teaching Writing in All Disciplines*. Jossey-Bass.

Carter, M., 2007. **Ways of Knowing, Doing, and Writing in the Disciplines**. *College Composition and communication*, 58: 385-418.

Gopen, G.D. and Swan, J.A., 1990. **The science of scientific writing**. *American Scientist*, 78: 550-558.

Gopen, G., 2004. **Expectations: Teaching Writing from the Reader's Perspective**, Longman, 416 pp.

Irvine, T.N. and Rumble, D., III, 1992. **A writing guide for petrological (and other geological) manuscripts**. *Journal of Petrology*, 46 pp.