

## Some Suggestions for Teaching Mathematical Communication

### Suggestions for helping students to give good presentations

**“Dry run” presentations** Watch at least one practice presentation for each student, and encourage students to do practice presentations with each other.

**Brief lecture** Before the students start to present, briefly remind them that the primary goal of presenting is not to demonstrate that they understand the material but rather to help the other students to understand the material.

**Class discussion** Hold a class discussion about how to give a good presentation. Perhaps use one of your own presentations as a seed for discussion. (For example, if you will be giving a talk in a different context, you may invite the students to give you feedback on a practice presentation.) The class discussion is likely to be most helpful to the students if it happens after each student has had the experience of giving a presentation.

**Feedback** Give students constructive feedback on their in-class presentations.

**Peer review/reflection** Have students give each other feedback on their in-class presentations. Also encourage students to make notes for themselves about things they want to do (or avoid) in their own presentations.

### Suggestions for helping students to write well

**Choice of topics** Help students to choose appropriate, carefully focused topics. Even the best writers have difficulty writing well when the topic of the paper is unfocused.

**Class discussion** Hold a class discussion about how to write well. You could perhaps use a draft of a paper you are writing as a seed for discussion.

**Peer review** Have students give each other feedback on each other’s papers. The assigned audience for undergraduate seminar papers is usually peers, so peers can effectively identify which parts of a paper need clarification.

**Feedback** Give each student feedback on a draft of the paper (perhaps a later draft than that reviewed by peers).

**Encourage sufficient time for revision** When students are busy at the end of the semester, it can be very tempting to relax the deadline for the paper draft; but for students to write well, they need feedback and sufficient time for revision. To avoid the end of term crunch, schedule the draft(s) as early in the term as is reasonable.

**More information about most of the above is available on the CI Space, and Susan Ruff is available to help with each.**

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