At MIT, the math department has recently collaborated with Writing, Rhetoric, and Professional Communication (WRAP), MIT’s writing-across-the-disciplines program, to renew Principles of Discrete Applied Mathematics, an introductory subject taken by sophomores and juniors. Our interdisciplinary goal is to teach students to communicate effectively as mathematicians: that is, to craft mathematical arguments not only to convince but also to communicate effectively to the target audience. The first part of the presentation will summarize this successful collaboration and the resulting interdisciplinary pedagogy. The collaboration is part of a broader collaboration of WRAP with disciplines across the institute; the second part of the presentation will focus on WRAP’s strategies of interdisciplinary collaboration that may be relevant to mathematics across the disciplines, including a research tool for visualizing interdisciplinary pedagogy. (Received September 22, 2015)