1. Record Nr. UNINA9910260615503321 Autore Poe Mya <1970-> Titolo Learning to communicate in science and engineering: case studies from MIT / / Mya Poe, Neal Lerner, and Jennifer Craig; foreword by James Paradis Cambridge, Massachusetts:,: MIT Press,, c2010 Pubbl/distr/stampa [Piscataqay, New Jersey]:,: IEEE Xplore,, [2010] Descrizione fisica 1 PDF (xii, 256 pages): illustrations Altri autori (Persone) LernerNeal CraigJennifer <1945-> Disciplina 501/.4 Communication in science Soggetti Communication in engineering Writing, Humanistic Physical Sciences & Mathematics Sciences - General Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references (p. [237]-248) and index. Nota di contenuto First steps in writing a scientific identity -- Taking on the identity of a professional researcher -- Carving out a research niche -- Learning to argue with data -- Writing and speaking collaboratively -- Conclusions. Sommario/riassunto To many science and engineering students, the task of writing may seem irrelevant to their future professional careers. At MIT, however, students discover that writing about their technical work is important not only in solving real-world problems but also in developing their professional identities. MIT puts into practice the belief that "engineers who don't write well end up working for engineers who do write well," requiring all students to take "communications-intensive" classes in which they learn from MIT faculty and writing instructors how to express their ideas in writing and in presentations. Students are challenged not only to think like professional scientists and engineers but also to communicate like them. This book offers in-depth case

studies and pedagogical strategies from a range of science and engineering communication-intensive classes at MIT. It traces the

progress of seventeen students from diverse backgrounds in seven classes that span five departments. Undergraduates in biology attempt to turn scientific findings into a research article; graduate students learn to define their research for scientific grant writing; undergraduates in biomedical engineering learn to use data as evidence; and students in aeronautic and astronautic engineering learn to communicate collaboratively. Each case study is introduced by a description of its theoretical and curricular context and an outline of the objectives for the students' activities. The studies describe the onthe-ground realities of working with faculty, staff, and students to achieve communication and course goals, offering lessons that can be easily applied to a wide variety of settings and institutions.