Record Nr. UNINA9910438244303321 Autore Moscovici Hedy Titolo Learn science, learn math, learn to teach science and math, Homo sapiens! / / Hedy Moscovici ; illustrations by Tal Moscovici ; chapter 6 by Katherine C. Wieseman and Hedy Moscovici; final editing by Penny J. Gilmer and Katherine C. Wieseman Rotterdam,: SensePublishers, c2013 Pubbl/distr/stampa **ISBN** 94-6209-154-4 94-6209-155-2 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (151 p.) Cultural perspectives in science education, Research dialogs;; v. no. 5 Collana Altri autori (Persone) MoscoviciTal WiesemanKatherine C GilmerPenny J Disciplina 370 Soggetti Science - Study and teaching Mathematics - Study and teaching Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Preliminary Material / Penny J. Gilmer and Katherine C. Wieseman --Nota di contenuto Worldview as a Dynamic Entity / Penny J. Gilmer and Katherine C. Wieseman -- What Do You Mean, You Know Science and Mathematics? / Penny J. Gilmer and Katherine C. Wieseman -- Emotional and Intellectual Involvement While Learning Science and Mathematics / Penny J. Gilmer and Katherine C. Wieseman -- Learning to Teach/Teaching to Learn Science and Mathematics / Penny J. Gilmer and Katherine C. Wieseman -- Leadership as Effective Collaborations in Science and Mathematics / Penny J. Gilmer and Katherine C. Wieseman -- Who Needs Science and Mathematics? / Penny J. Gilmer and Katherine C. Wieseman -- Bibliography / Penny J. Gilmer and Katherine C. Wieseman -- Index / Penny J. Gilmer and Katherine C. Wieseman. Sommario/riassunto Dr. Hedy Moscovici's life on three continents and her battle with ovarian cancer shaped the unique co-learning and participative leadership perspective on science and mathematics education shared in this book. This text has multiple audiences – prospective and practicing

teachers wanting to motivate their students to learn, science and

mathematics educators mentoring teachers to become transformative intellectuals and critical pedagogues, parents interested in their children's advancement, and interested policymakers and public wishing to deepen their understanding about learning in general and educational issues in science and mathematics. Two mottos, "I can't learn from you if you can't learn from me" and "to teach is to learn twice," summarize the essence of her message. The spotlight is on the critical interdependence of factors, specifically human ability to construct understanding; necessity of disequilibrium to spark neural rewiring; cognition-emotion (pleasure vs. pain, even science or math phobia) connections; sociocultural context; dilemma created by the absence of a clearly trustworthy "learning meter" for a society valuing objective measurement of quality of learning; human relationships sustained by three R's (rights, responsibilities, respect); and, heightened awareness of power relationships leading to a spirit of collaboration, recognition of each individual's strengths and expertise; and critical pedagogy.