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Nota di contenuto	Prelims -- That none shall perish -- Theoretical underpinnings of TIDES: Priorities, processes, and promise -- Cybernetic girls can be pinky: strategies to recruit and retain Latinas into STEM in the context of faculty-to-student empowerment -- Changing faculty culture to promote diversity, equity, and inclusion in STEM Education -- In search of hidden but accessible truths: coding for all at Queens College -- Fostering an environment for all students to succeed in computer science: integrating culturally responsive pedagogies with curricula redesign -- Culturally responsive strategies for addressing recruitment and retention of women in STEM: online modules for building STEM majors' computational skills -- Culturally responsive computational science through research experience in core-curriculum courses -- A journey of discovery -- Equity through access to computer science learning at a small liberal arts college -- Challenging us to change -- The rising TIDE of Wright State University: context, connections, and

consequences -- Music as the icebreaker for learning to code -- Interventions addressing recruitment and retention of underrepresented minority groups in undergraduate STEM disciplines -- Strengthening computer and mathematical sciences engagement and learning -- Measurement and assessment -- Index.

Sommario/riassunto

By the end of this decade, the U.S. economy will annually create hundreds of thousands of new jobs requiring a bachelor's degree in STEM fields, particularly computer science. This increasing need for computer scientists, coupled with an inconsistent agenda for managing dramatic shifts in the demographic landscape of higher education, compromises our competitiveness in scientific discovery and innovation. As higher education seeks to address this issue, the need for more culturally responsive approaches to undergraduate STEM teaching also increases. This book uses the power of reflection, storytelling, and data to holistically demonstrate the effectiveness of a novel professional development intervention for STEM faculty - Teaching to Increase Diversity and Equity in STEM, or TIDES - that significantly increased faculty self-efficacy in implementing culturally responsive pedagogies. In it, the editors combine the authentic voices of authors from multiple institutional contexts and individual worldviews to assimilate and synthesize broad theoretical concepts into practice in usable ways, while also offering concrete applicable examples of strategies and solutions that serve as an important comprehensive reference for all undergraduate educators and administrators. This practical guide provides a durable platform for building capacity in understanding of the cultural complexities and institutional realities of recruiting and retaining diverse students in STEM, particularly the computer sciences.