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Nota di contenuto	Cover -- Half Title -- Title Page -- Copyright Page -- Dedication -- Table of Contents -- List of Figures -- List of Tables -- Foreword -- Preface -- Acknowledgments -- Biographical Note -- 1 Culture, Identity, and Mathematics Achievement -- Introduction -- Theoretical Frameworks -- Critical Race Theory -- Black Feminist Thought -- Culturally Specific Pedagogy -- Prior Research on Culturally Based Education -- Early Culturally Based Studies -- Teachers' Beliefs about Culture and Learning Mathematics -- Mathematics Identity and Mathematics Socialization -- Chapter 1 Discussion Questions -- Notes -- 2 Cognition and Cultural Pedagogy -- Culture, Cultural Transmission, and Cultural Capital -- Theories about Cognition and Culture -- Cognitive Theory -- The Saxe Model of Cognition -- Children's Cognition and Learning in Mathematics -- Culture and Children's Mathematical Reasoning -- Car Wash Problem -- Church Problem -- Reform-Based Mathematics Education and Opportunities to Learn -- Summary -- Chapter 2 Discussion Questions -- Notes -- 3 Cultural Pedagogy -- The Need for Cultural Pedagogy -- Studies on

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Housing Inequality -- Black Firsts in Science and Mathematics -- St. Elmo Brady (1884-1966) -- Martha Euphemia Lofton Haynes (1890-1980) -- Bessie Blount (1914-2009) -- Ed Dwight (1933-) -- Jessie Eugene Russell (1948-) -- Aprille Ericsson-Jackson (1963-) -- Summary -- Chapter 8 Discussion Questions -- Notes -- 9 Race and Achievement in Mathematics: A Historical Perspective -- The Clinton 12 -- Desegregation and School Busing -- Resegregation and Inequitable School Funding -- The Pedagogy of Poverty -- Perspectives on the Achievement Gap -- Mathematics Socialization and Identity among African-American Students -- Links to Everyday Mathematics -- Conclusions and Recommendations -- Chapter 9 Discussion Questions -- Notes -- Appendix A-Computational Thinking Rubric -- Appendix B-Scratch Dance Party Tutorial -- Note -- Appendix C-Knex Data Collection Sheet -- Note -- Appendix D-Sculptris Bison Tutorial -- Note -- References -- Index.

edition offers a wide variety of conceptual and curricular resources for teaching mathematics in a way that combats and confronts the forms of oppression that students face today. Addressing stratification based on race, class, and gender, Leonard offers lesson templates that teachers can use with ethnically and culturally diverse students and makes the link between research and practice. Connecting cutting-edge and emerging technologies to culturally specific pedagogy, the second edition features new chapters on mathematics and social justice, robotics, and spatial visualization. Applying a more expansive focus, the new edition discusses current movements such as Black Lives Matter and incorporates examples of rural and tribal students to paint a broader picture of what culturally rich mathematics classrooms actually look like. The text builds on sociocultural theory and research on culture and mathematics cognition to extend the literature and better understand minority students' goals and learning needs. Including new discussion questions and new examples, lessons, and vignettes of integrating culture in the mathematics classroom, this book employs pedagogical research to field-test new instructional methods for culturally diverse and female students.

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