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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Cover-1; CONTENTS; FOREWORD; ABOUT THE EDITORS; Part I: Overview; 1- Introduction to Models and Approaches to STEM Professional Development; 2 - Professional Development: A Historical Summary of Practices and Research; 3 - The Importance of Viable Models in the Construction of Professional Development; 4 - Major STEM Reforms Informing Professional Development; Part II: State and District Models and Approaches; 5 - Using Constructivist Principles in Professional Development for STEM Educators: What the Masters Have Helped Us Learn 6 - Ohio's 30 Years of Mathematics and Science Education Reform: Practices, Politics, and Policies 7 - Improving and Sustaining Inquiry-Based Teaching and Learning in South Carolina Middle School Science Programs; 8 - K20: Improving Science Across Oklahoma; 9 - The iQUEST Professional Development Model; 10 - The Boston Science Initiative: Focus on Science; 11 - Seattle Public Schools' Professional Development Model: Preparing Elementary Teachers for Science Instruction; 12 - New York City STEM Professional Development Partnership Model

Sommario/riassunto

The arrival of the Next Generation Science Standards (NGSS) makes it the ideal time to kick-start your professional development program, and this ambitious book is the perfect source of inspiration to help you do so. The book's emphasis is on developing highly effective teachers who are expected to improve student achievement in STEM education; its focus is on research-based models underlying systemic reform efforts across the nation. The book highlights several successful programs and provides forward-looking insights into the needed professional development surrounding the NGSS.