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Nota di contenuto	Introduction (Gail and Dani) -- Part I: Student Understanding -- Chapter 1. Visualizing Chance: Tackling Conditional Probability Misconceptions (Budgett, Stephanie) -- Chapter 2. Students' Development of Measures (Büscher, Christian) -- Chapter 3. Students' Reasoning about Variation in Risk Context (Orta Amaro, José Antonio) -- Chapter 4. Students' Aggregate Reasoning with Covariation (Aridor, Keren) -- Part II: Teaching for Understanding -- Chapter 5. Design for Reasoning with Uncertainty in Informal Statistical Inference (Manor Braham, Hana) -- Chapter 6. The Role of Technology in Building Conceptual Images of Fundamental Concepts in Statistics (Burrill, Gail) -- Chapter 7. Informal Inferential Reasoning and the Social. How an Inferentialist Epistemology can Contribute to Understanding Students'

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### Sommario/riassunto

This book focuses on international research in statistics education, providing a solid understanding of the challenges in learning statistics. It presents the teaching and learning of statistics in various contexts, including designed settings for young children, students in formal schooling, tertiary level students, and teacher professional development. The book describes research on what to teach and platforms for delivering content (curriculum), strategies on how to teach for deep understanding, and includes several chapters on developing conceptual understanding (pedagogy and technology), teacher knowledge and beliefs, and the challenges teachers and students face when they solve statistical problems (reasoning and thinking). This new research in the field offers critical insights for college instructors, classroom teachers, curriculum designers, researchers in mathematics and statistics education as well as policy makers and newcomers to the field of statistics education. Statistics has become one of the key areas of study in the modern world of information and big data. The dramatic increase in demand for learning statistics in all disciplines is accompanied by tremendous growth in research in statistics education. Increasingly, countries are teaching more quantitative reasoning and statistics at lower and lower grade levels within mathematics, science and across many content areas. Research has revealed the many challenges in helping learners develop statistical literacy, reasoning, and thinking, and new curricula and technology tools show promise in facilitating the achievement of these desired outcomes.

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