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Descrizione fisica	1 online resource (325 pages)
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Nota di contenuto	Section I Commentary: Commentary on Affect, Cognition and Metacognition in Mathematical Modelling Chapter 1: The construct of affect in mathematical modelling Chapter 2: Metacognition in mathematical modelling-an overview Chapter 3: Principles for designing research settings to study spontaneous metacognitive activity Chapter 4: Engagement structures and the development of mathematical ideas Commentary: The what and why of modeling Commentary: Engaging students in mathematical modeling: Themes and issues Chapter 5: Exploring a conative perspective on mathematical engagement Chapter 6: Exploring teachers' epistemic beliefs and emotions in inquiry-based teaching of mathematics Chapter 7: Mathematics learning experiences: The practice of happiness and the happiness of practice Chapter 8: Development of modelling routines and its relation to identity construction Commentary: Commentary on section III: Connections to theory and practice Chapter 9: Flow and mathematical modelling: Issues of balance Chapter 10: The complex relationship between

	mathematical modelling and attitude towards mathematics Chapter 11: Teaching modeling problems and its effects on students' engagement and attitude toward mathematics Chapter 12: Affect and mathematical modelling assessment-A case study on students' experience of challenge and flow during a compulsory mathematical modelling task by engineering students Chapter 13: Flow and Modelling Chapter 14: A coda on affect.
Sommario/riassunto	In the book, the relationship between affect and modeling is discussed because, as educational psychologists have suggested for decades, affect directly influences achievement. Moreover, given the importance of mathematical modeling and the applications to high level mathematics, it provides the field of mathematics psychology with insight regarding affect, in relation to mathematical modeling. By doing so it helps determine the degree to which understanding of mathematics and understanding affect in mathematical modeling episodes may have a direct effect on cognition.