

1. Record Nr.	UNINA9910450758903321
Titolo	The role of communication in learning to model [[electronic resource] /] / edited by Paul Brna ... [et al.]
Pubbl/distr/stampa	Mahwah, N.J., : L. Erlbaum Associates, 2002
ISBN	1-138-01271-8 1-135-64003-3 1-282-59623-3 9786612596230 1-4106-0628-7
Descrizione fisica	1 online resource (352 p.)
Altri autori (Persone)	BrnaPaul
Disciplina	370.15 371.102/2
Soggetti	Communication in education Education - Simulation methods Models and modelmaking Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Book Cover; Title; Copyright; Contents; List of Contributors; Preface; Acknowledgments; I: Coordinating Representations; Chapter 1: Coordinating Mathematical With Biological Multiplication: Conceptual Learning as the Development of Heterogeneous Reasoning Systems; Chapter 2: Modeling in Teaching and Learning Elementary Physics; Chapter 3: Conceptualizing and Constructing Linked Models: Creating Coherence in Complex Knowledge Systems; II: Provoking More Effective Modeling; Chapter 4: Construction and Abstraction: Contrasting Methods of Supporting Model Building in Learning Science Chapter 5: Cognitive Support in Computerized Science Problem Solving: Eliciting External Representation and Improving Search StrategiesChapter 6: Interactive Model-Building Environments; Chapter 7: Enhancing Reflective Modeling Through Communicative Interaction in Learning Environments; III: Collaboration and Language; Chapter 8: Modeling the Modelers: Communicating About Content Through Shared

External Representations; Chapter 9: Teachers' Explanations of Students' Collaborative Modeling Activities
Chapter 10: The "Power" of Text Production Activity in Collaborative Modeling: Nine Recommendations to Make a Computer- Supported Situation Work
Chapter 11: Argumentative Interactions, Discursive Operations, and Learning to Model in Science; Author Index; Subject Index

Sommario/riassunto

In this book, a number of experts from various disciplines take a look at three different strands in learning to model. They examine the activity of modeling from disparate theoretical standpoints, taking into account the individual situation of the individuals involved. The chapters seek to bridge the modeling of communication and the modeling of particular scientific domains. In so doing, they seek to throw light on the educational communication that goes on in conceptual learning. Taken together, the chapters brought together in this volume illustrate the diversity and vivacity of
