



## METADATA

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### Abstract

This textbook, which is aimed primarily at postgraduate students of pedagogical departments, presents specific forms of research in Science Education and Museology of Natural Sciences. Its content complements, updates and deepens the theoretical reflection and methodological approaches of two other books which appear in this book as a prerequisite knowledge: the "Issues of Natural Sciences. The construction of the school knowledge" and "The didactic approach of the museum of natural sciences". The textbook consists of eleven chapters divided into three thematic sections. The first section ("Teaching the natural sciences and students' thinking") includes chapters that explore the epistemological background, the psychological dimension and the implications for the teaching of students' causal thinking, and especially

the version of linear causal reasoning, a kind of reasoning which is a basic form of meaning rendering in the natural world from the youngest ages. The second section ("The cultural dimension of scientific knowledge in teaching") deals with the cultural character of the content of scientific knowledge which appears through the relationships formed between this content and history, philosophy, technology, art, and society in general. The third section ("Non-formal education in the natural sciences") focuses on research conducted in the context of non-formal education in the natural sciences, a research that presents interdisciplinary characteristics, since it is contacted in the intersection of at least three research fields, which are the Science Education, the Scientific Museology and the Science Communication.

