

# Preface

This book is about the theory of conceptual profiles, which emerged in the literature on science education in 1995, with the paper “Conceptual change or conceptual profile change?” published by Eduardo Mortimer in *Science & Education*. Since then many researchers have worked on this theme, mainly in the Brazilian science education community (but also in the international community), dealing with major structuring scientific concepts: matter, energy, and life.

The idea of a conceptual profile – that people can exhibit different ways of seeing and representing the world, which are used in different contexts – was proposed by Mortimer in the 1990s as an alternative to counterbalance a strong tendency that conceptual change theories and models exhibited at that time: the commitment to the idea that students should be led to break away with everyday knowledge, their previous concepts, and even tenets related to their worldviews, treated only as obstacles to science learning. Even though the theory began as an alternative model to conceptual change, it evolved through the incorporation of a sociocultural approach and pragmatist philosophy, becoming a theory of teaching and learning scientific concepts. We will provide more details on the theory in the introduction to this volume and in Part I, “Conceptual Profiles: Theoretical, Epistemological, and Methodological Bases of a Research Program.”

It was with the support and collaboration of many authors who are signing the chapters of this book that this theory was constructed. With their contribution, we intend with this volume to present the theory and its implications to an international audience. Our decision to publish a book in English on the theory of conceptual profiles coincides with the reappearance of conceptual change in the science education scene, with new publications such as a special issue (July 2008) in *Cultural Studies of Science Education* and the Routledge *International Handbook of Research on Conceptual Change* (2008).

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We dedicate this book to Phil Scott, whose death in July 2011 was a big loss for us. Phil had an enormous energy for working but also for living and making our lives enjoyable and easier.

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