



International Council of Associations for Science Education

Science Education International

The Journal of the International Council of Associations for Science Education

VOLUME 19 • NUMBER 3 • SEPTEMBER 2008

ISSN 1450-104X

Science Education International

Volume 19, No. 3, September 2008

Contents

Foreword

Jack Holbrook 256

Introduction to the Special Issue of Science Education International
Devoted to PARSEL

Jack Holbrook 257

A Big Problem for Magellan: Food Preservation.

Cecília Galvão, Pedro Reis, and Sofia Freire 267

The Impact of the PARSEL Way to Teach Science in Germany on Interest,
Scientific Literacy, and German National Standards

Wolfgang Graeber, and Martin Lindner 275

Increasing Science Teachers' Ownership through the Adaptation of the
PARSEL Modules: A "Bottom-up" Approach

Ron Blonder, Mira Kipnis, Rachel Mamlok-Naaman, and Avi Hofstein 285

Teaching the PARSEL Way: Students' Reactions to Selected PARSEL Modules

Jack Holbrook, Miia Rannikmae, and Klaara Kask 303

Between Teaching and Researching: Envisaging Ownership Benefits of
Involving Teachers from an In-service Teacher Training Program in the
PARSEL Project

Claus Michelsen, and Jan Alexis Nielsen 313

Using PARSEL Modules to Contextualizing the States-Of-Matter Approach
(SOMA) to Introductory Chemistry

Georgios Tsaparlis 323

A Conceptual Framework for the Enhancement of Popularity and Relevance
of Science Education for Scientific Literacy, based on Stakeholders' Views
by Means of a Curricular Delphi Study in Chemistry

Claus Bolte 331