

Teaching Primary Science: promoting enjoyment and developing understanding

by Peter Loxley, Lyn Dawes, Linda Nicholls & Babs Dore

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This book is intended both for primary teachers as well as for student teachers in training. The book is divided into two sections: the first dedicated to theory and practice; while the second focuses on subject knowledge and ideas for practice. The first section tackles main issues related to the teaching of primary science to young children. Issues tackled include: a review of different views of science learning and how children at primary level specifically learn science; scientific understanding and mental models; how talk and language enhance learning; scientific inquiry and how to capitalise on children's national curiosity; how to assess science understanding and skills; as well as how to utilise 'out of school' visits to explore nature. The second section then focuses specifically on a number of scientific aspects such as: the Earth and beyond; Energy; Interdependence; diversity; adaptation and evolution; health and well-being; the particulate nature of matter; changing materials; electricity and magnetism; forces and motion; light; and sound. These topic areas are covered in terms of basic concepts for teachers doing science with primary children as well as providing ideas for inquiry.

This book can be a good handbook for teachers. The first section provides teachers with some background on issues to consider relating to pedagogical issues. Although not that theoretical, it highlights main approaches to teaching science in a simple and practical way. It thus touches on inquiry, storytelling, how children understand concepts. Each chapter includes at strategic points a box which asks the reader to think about. This approach gives a dynamic approach and promotes reflection on practice. The concept part of the book makes up a larger portion of the book. It provides a coverage of the main scientific concepts related to the topic covered as well as has sections where ideas for possible inquiry activities are included.

This book is written in a way that is reader friendly to the non-science specialist like primary school teachers. It can be used by teachers as an accompanying handbook for both practising teachers as well as teaching in pre-service training as it provides both science content as well as pedagogic support.

by

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