

LANGUAGE AND LITERACY IN SCIENCE EDUCATION

JERRY WELLINGTON
JONATHAN OSBORNE



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All teachers look and hope for more scientific forms of expression and reasoning from their pupils, but few have been taught specific techniques for supporting students' use of scientific language. This book is full of them . . . In this very practical book, Jerry Wellington and Jonathan Osborne do much more than summarize research which shows how very much language, in all its forms, matters to science education. They also show teachers what can be done to make learning science through language both more effective and more enjoyable.

Jay L. Lemke, Professor of Education, City University of New York

Science in secondary schools has tended to be viewed mainly as a 'practical subject', and language and literacy in science education have been neglected. But learning the language of science is a major part of science education: every science lesson is a language lesson, and language is a major barrier to most school students in learning science. This accessible book explores the main difficulties in the language of science and examines practical ways to aid students in retaining, understanding, reading, speaking and writing scientific language.

Jerry Wellington and Jonathan Osborne draw together and synthesize current good practice, thinking and research in this field. They use many practical examples, illustrations and tried-and-tested materials to exemplify principles and to provide guidelines in developing language and literacy in the learning of science. They also consider the impact that the growing use of information and communications technology has had, and will have, on writing, reading and information handling in science lessons.

The authors argue that paying more attention to language in science classrooms is one of the most important acts in improving the quality of science education. This is a significant and very readable book for all student and practising secondary school science teachers, for science advisers and school mentors.

Professor Jerry Wellington taught science in Tower Hamlets, London before moving to the University of Sheffield where he has extensive experience of teaching on PGCE courses, MEd and EdD work, INSET for teachers and mentor training programmes.

Dr Jonathan Osborne is a senior lecturer in science education at King's College London. Prior to that he was an advisory teacher with the ILEA and taught physics in secondary schools for nine years in Inner London. He has a wide ranging set of research interests including young children's understanding of science, pupils' attitudes to science and teaching about the history and philosophy of science.

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