

Foreword

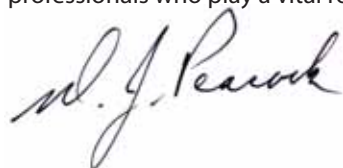
School science education is important for the development of a scientifically literate society with citizens having the skills to make informed decisions on issues relevant to their lives, to equip them to operate in workplaces which are increasingly more scientific and technological, and to encourage a desire for further education in these areas. This philosophy underpins the *Primary Connections* project.

The Australian Academy of Science recognises the demands placed on primary school teachers, including the need to devote time to developing students' literacy. Hence its innovative project *Primary Connections: linking science with literacy* aims to improve students' learning outcomes in the areas of both science and literacy simultaneously. This is achieved through a professional learning program supported by quality curriculum resources that enhance teachers' confidence and competence in teaching science and establish meaningful connections between science and literacy learning. The program aims to engage and excite our primary school students in science – in understanding the world around them.

Primary Connections was trialled in 56 schools in eight states and territories during the 2005 school year, and we are indebted to their staff for their co-operation and commitment to the project. A comprehensive research programme to evaluate the trial was undertaken by Professor Mark Hackling (Edith Cowan University) and Associate Professor Vaughan Prain (La Trobe University), authorities in science and literacy education in Australia. This report presents the outcomes of their research and describes the significant gains that have been made during the trial, particularly in the areas of student learning, teacher confidence and attitudinal change.

The Academy's confidence in proceeding to Stage 3 of the project, which will include a national rollout of *Primary Connections*, is based on evidence that the program has been collaboratively developed, well conceptualised, has undergone substantial trialling in the classroom and has been monitored by thorough research. This report arose from our desire to ensure *Primary Connections* is informed by quality research and makes a positive impact on the science and literacy education of primary school students Australia-wide.

This report has been made possible thanks to the support of the Department of Education, Science and Training (DEST) under the Australian Government Quality Teacher Programme, as a quality teacher initiative. It has been guided by its Steering Committee with members from the Australian Academy of Science and DEST, and has benefited from input by its Reference Group which includes representatives from all state and territory jurisdictions. We anticipate that the research presented in this report will be an invaluable resource for the wide range of education professionals who play a vital role in developing and sustaining a scientifically literate community.



Dr Jim Peacock, AC PresAA FRS FTSE
President
Australian Academy of Science