

# INSPIRING *excellence* IN SCIENCE EDUCATION

The **Australian Academy of Science** is committed to promoting science education, both as a contribution to enhancing scientific literacy and to encourage young people to consider careers based on science and technology. The Academy contributes actively to the formulation of policy for science education, develops teaching resources for primary and secondary school science, and fosters public understanding of science.

## SCHOOL SCIENCE PROGRAMS

The Academy has two targeted programs to support the effective teaching of science in primary and early secondary schools – *Primary Connections: linking science with literacy* and *Science by Doing*.

The Academy has been involved in all stages of development of the new *Australian Curriculum: Science* – foundation to year 10. Developed with Australian Government funding, *Primary Connections* and *Science by Doing* support the implementation of the new curriculum and have been embraced by schools across Australia.

### **Primary Connections:** *linking science with literacy*

*Primary Connections* is an innovative teaching and learning approach which aims to support science teaching in primary schools with curriculum resources and a professional learning program. Trained professional learning facilitators work within each state and territory to support schools interested in implementing the program.\*

[www.science.org.au/primaryconnections/](http://www.science.org.au/primaryconnections/)

### **Science by Doing**

This national initiative for the enhancement of secondary science education improves science learning by engaging students through an inquiry-based approach. A suite of educational resources support the overarching *Science by Doing* professional learning approach, which recognises that teachers themselves are the key to educational change.\*

[www.science.org.au/sciencebydoing/](http://www.science.org.au/sciencebydoing/)

## OTHER EDUCATIONAL INITIATIVES

The Academy also runs two longstanding education and awareness programs: *Interviews with Australian scientists*, established in 1993, and *Nova: Science in the news*, established in 1997. While not specifically aligned with school curricula, these programs provide valuable educational resources for use in schools, as well as accessible science for a broader audience.

### **Nova: science in the news**

*Nova* is a web based education and public outreach program with a focus on the science behind topical issues. Topics bring together widely divergent fields, cover areas as diverse as gene technology, nanoscience, human bionics and climate change. Topics provide up-to-date 'real life' information about current Australian research and include teacher notes, student activities, further reading and resources.

[www.science.org.au/nova/](http://www.science.org.au/nova/)

### **Interviews with Australian scientists**

*Interviews* is a web and DVD based education and public outreach initiative providing a human perspective to, and record of, the history of Australian science for future generations. Scientists talk about their early life, development of interest in science, mentors, research work and other aspects of their careers. Scientists also discuss the historical aspects of science and detail a variety of career paths in scientific research.

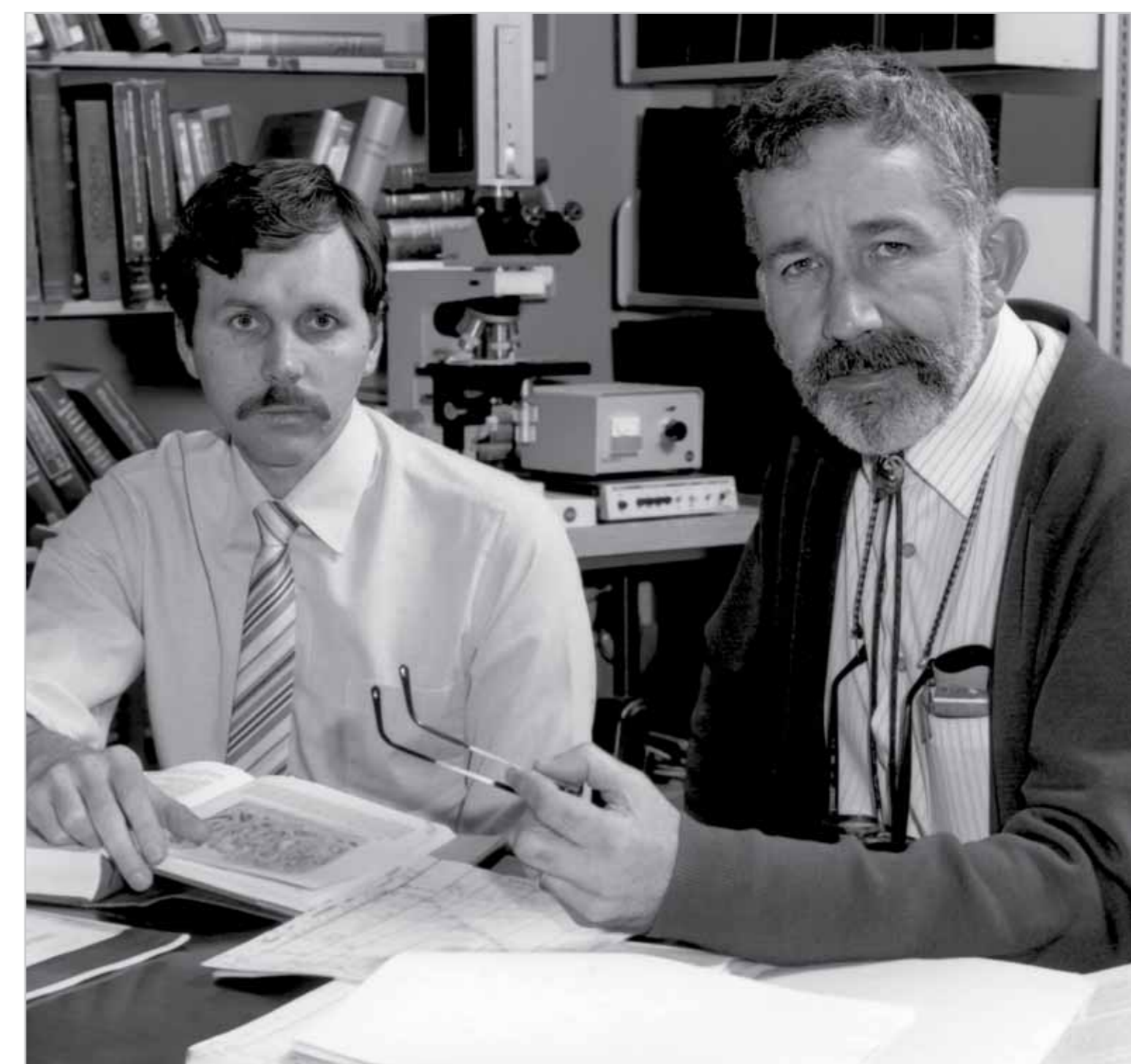
[www.science.org.au/scientists/](http://www.science.org.au/scientists/)



Silk moths – *Primary Connections*



*Nova* honeybee topic – R Maleszka, ANU



B Marshall and R Warren – *Interviews with Australian scientists*



Dawson, V 2008. *Science is primary: a review of Primary Connections stage 3*. Canberra: Australian Academy of Science

Rennie, L 2010. *Evaluation of the Science by Doing Stage One Professional Learning Approach*. Canberra: Australian Academy of Science