

MEDIA RELEASE

For release Tuesday 15 May 2007

Curriculum reform a key to ending science crisis

The failure of school science to respond to the changing needs of students and the changing nature of science itself has created a crisis in Australian science education that shows no sign of abating according to a new review of research.

Australian Education Review 51, *Re-imagining Science Education: Engaging students in science for Australia's future*, by Deakin University Professor of Science Education Russell Tytler was released today by the Australian Council for Educational Research (ACER). It calls for major curriculum reform, arguing that the time has passed for tinkering around the edges of a science curriculum that belongs to the past.

Using research presented at ACER's *Research Conference 2006, Boosting Science Learning – what will it take?* as a base for a broad and intense review of the literature, the review calls for a 're-imagined' science education that is focused not only on preparing future scientists, but also on engaging all young people in science.

"We see clear evidence that the curriculum and classroom practice are failing to excite the interest of many, if not most, young people at a time when science is a driving force behind so many developments and issues in contemporary society," Professor Tytler writes.

The review argues that school science is too heavily skewed towards the abstract conceptual canon of science, and too often ignores the realities of students' own lives and interests. The review examines and models new approaches to the teaching of science across all levels of schooling: approaches that give less emphasis to the memorisation of content and more emphasis to the nature of science and how it operates.

Releasing the review, ACER chief executive Professor Geoff Masters said the 'flight from science' described by Professor Tytler was a worrying trend that required urgent action.

"Some critics of the school curriculum have been calling for a return to the past. But it is clear that, at least in science, past approaches are failing us. Science curricula of the future must be less crammed with facts and more focused on developing skills in using science to investigate real-world problems," Professor Masters said.

Russell Tytler is Professor of Science Education at Deakin University, Victoria. He has had a long involvement in national science curriculum and professional development projects. An active contributor to debate in the field, he is the author of numerous academic and professional publications.

Australian Education Review number 51, *Re-imagining Science Education: Engaging students in science for Australia's future*, by Russell Tytler with a foreword by Professor Jim Peacock, Australian Chief Scientist, is available for download from the ACER website at www.acer.edu.au. Print copies can be purchased from ACER Press. Contact customer service on (03) 9835 7447 or via email on sales@acer.edu.au

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