National Survey

Project Title
Issues in Teaching and Learning Science, ICT, and Mathematics in Rural and Regional Australia: A National Survey

Project Team
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Description

Studies show that students in rural and regional areas tend to achieve at a lower level than their peers at metropolitan schools when it comes to science, ICT and mathematics. Furthermore, many teachers in rural and regional Australia face a range of problems associated with their geographical and professional isolation. This research represents the first national attempt to generate high quality base-line data identifying the concerns of rural and regional teachers involved in these subject areas, and the issues that may be limiting the learning outcomes of their students. It is hoped that the findings of the study will guide initiatives to address the concerns, and optimise the strengths, of rural and regional teachers and schools.

By now we have become accustomed to the annual media dissection of public examination results. Girls versus boys, public versus private schools, and the fuss over this year’s league table. However, one feature seldom covered is the persistent divide between city and country high school students. Year after year, city students dominate the Year 12 high achiever lists out of all proportion to their number, particularly in mathematics and science courses (SMH, 12/7/04:). The recently released PISA results for 15 year olds confirm this national trend, with city students ‘performing significantly better than students in regional centres, who in turn had better results than rural students’ (SMH, 8/12/04).

The gap between city and country students is a concern of SiMERR Australia, the new National Centre of Science, Information and Communication Technology, and Mathematics Education for Rural and Regional Australia, based at the University of New England. Established through a federal government grant, SiMERR Australia aims to support primary and secondary teachers in non-metropolitan schools in their efforts to improve the learning outcomes of students in science, ICT and mathematics.

To identify the concerns of these teachers, the SiMERR National Centre will shortly be conducting one of the largest surveys of teachers ever undertaken in Australia. Every primary and secondary teacher involved in science, ICT and mathematics education in non-metropolitan schools will be invited to have their say on a range of issues, from the benefits of teaching in country schools, to coping with professional isolation. In order to provide data for comparison, a large number of city schools in each state and territory will also be invited to participate.

Commissioned by the Department of Education, Science and Training (DEST), and supported by state and territory authorities, parent bodies and non-government education providers, the study will contribute to a better understanding of education in rural and regional schools, and provide direction for policy to improve the learning outcomes of students in these subject areas.