

EDITORIAL

The output of science education research and mathematics education research comes from initiatives at the international, national, state/province, school/university or personal level. This research output is presented at local, national and international conferences and is published in books, monographs, and professional journals. Behind all these products are people who have an education as researchers in science education and mathematics education.

But it was not always like this. With the exception of the National Association for Research in Science Teaching (NARST), based in the United States, which had its inception in 1928, most development has occurred in these professions in a period of less than three decades. An obvious question that comes to mind is ‘How have these professions developed so rapidly in such a short period of time?’

Approximately thirty years ago, many of today’s well-known research organizations had only just started or did not exist. For example, the Australasian Science Education Research Association (then as the Australian Science Education Research Association) held its first annual conference in 1971, the Gesellschaft für Didaktik der Chemie und Physik – GDCCP (Association for Chemistry and Physics Education) was founded in 1973, and the Mathematics Education Research Group of Australasia Inc. (MERGA) held its first meeting in 1977. The European Science Education Research Association (ESERA) came into existence in the mid 1990s and held its first meeting in 1997.

Readers of this journal will be able to document when their national associations for science education research and mathematics education research were formed. Such a listing would make interesting reading.

The people producing books, monographs and journal articles have received their education at university, often in a designated Department, Centre or Institute for Science Education or Mathematics Education, in a Department of Education or in a discipline Department or School such as physics, chemistry, biology or mathematics.

However, thirty years ago, as a university course of study, doctoral research programs in science education and in mathematics education in many nations did not exist or where they did exist they were not well devel-



oped. Typically those persons desirous of graduate level studies in science education or mathematics education went to the United States. Indeed, the United States was among the first nations to treat science education and mathematics education as serious fields of scholarship and many students from many nations sought their education there.

Many of these students returned to their homeland and helped build up national programs in science education research and mathematics education research.

So the internationalisation of our professions has come about by initiatives in some nations to invest in programs and the willingness of individuals to travel overseas to gain their doctoral qualifications, often in a language other than their own first language.

The Science and Mathematics Education Centre at Curtin University where I work perhaps is a good example of this internationalisation of our professions. We are fortunate to work with graduate students from a wide range of nations – Indonesia, Mozambique, New Zealand, Papua New Guinea, Philippines, Singapore, South Africa, Thailand, and the United States of America. For many of these students, English is not their first language.

However, one must not think of the internationalisation of research in science education and mathematics education as being only centred on English language countries.

From my colleagues in Germany, I know of students from many nations studying at German universities and having the possibility of writing theses in either German or English. In addition, ESERA holds a summer school every two years for doctoral students in science education and the language of discourse is English. This says a great deal about the willingness of doctoral students and academic colleagues to work in a language other than their first language. Indeed, the willingness to speak, write and present papers in English is another hallmark of the internationalisation of our professions. Indeed, the *International Journal of Science and Mathematics Education* is supportive of this internationalisation and as the Editor-in-Chief, Fou-Lai Lin, wrote in his editorial of the first issue, this journal is supportive in a concrete way of those authors whose first language is not English.

The internationalisation of our professions will continue so long as we seek out opportunities for collaboration with academic colleagues from overseas to work on joint projects. Many of these initiatives are already in place as can be seen, for example, when reading the countries of authorship of many journal articles.

But I would like to see this collaboration and internationalisation enhanced by offering doctoral students the possibility to work on projects in different countries from the ones in which they earn their degrees, for increased opportunities for post-doctoral education – an experience more readily available in the sciences, and short term or longer visits for academic colleagues to work on research projects in another country. Again I realise that some of these initiatives already exist but they can be extended and greater opportunities made available if they become a more central part of our thinking as an international profession.

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