

The joy of teaching (Note †)

Why do people become teachers? Some of the reasons for entering science and mathematics teaching include: wanting to make a difference, good job conditions, liking young people, loving science and maths, being good at teaching, having had a good maths/science teacher, a shortage of teachers, and a love of learning.²

But there must be more fundamental reasons for choosing teaching as a profession, and more importantly, for staying in the profession. There is a profound joy and satisfaction in making things, cooking, completing a project, building something, gardening, sewing, writing, performing music and drama. All of these are creative acts. The greatest achievement of all is not the creation of an object or an experience, but the development of a person. Parents, teachers, scout and guide leaders, coaches and instructors have all shared in this experience. The joy of teaching comes from assisting others to develop their skills and knowledge, to grow in maturity and self-confidence, and to fulfil their potential.

In many East Asian societies, scholars, teachers and scholarship are held in high esteem: education has been valued as an assured route to social advancement. Australia has a different cultural heritage. Australia is a harsh country. Physical strength and ability were necessary for the survival of the aboriginal people and European colonists. Academic knowledge was either irrelevant or a second-best choice for those who lacked physical ability. Even in 21st century Australia, we are more likely to hold celebratory parades for athletes, and racehorses, than we are for teachers and scientists. This year, 2012, Australia Post has released stamps featuring Australian Nobel laureates, William Bragg, Howard Florey, Frank Macfarlane Burnet, John Carew Eccles and Patrick White. To the best of my knowledge, more recent laureates, Brian Schmidt, Elizabeth Blackburn, Barry Marshall, Robin Warren, Peter Doherty, and John Cornforth, have not been lauded in the same manner. It is an interesting comparison that successful Olympians were featured on Australian postal stamps within days of their achievements.

Some countries attract their best and brightest students into teaching by offering financial incentives. After all, this is an investment in the development of the greatest national asset, our future generations. The recent report, *Health of Australian Science*,^{3,‡} from the Office of the Chief Scientist, notes that there has been continued difficulty in recruiting physics and chemistry teachers,⁴⁻⁶ and that secondary school science and maths teachers appear on the Australian government's Skills Shortage Lists.^{3,7} In his address to the address to the National Press Club in May 2012, Ian Chubb, Australia's Chief Scientist, noted that 39% of science offers nationally in 2011 went to students with an Australian Tertiary Admission Rank (ATAR) over 90, while it was 5.8% for education offers, and he said that the government should offer \$10,000 cash incentives to high-performing maths and science graduates to become teachers.^{8,9}

We need good teachers, and especially teachers with good science and chemistry backgrounds. It is also true of all school levels, including primary. Job satisfaction and the joy of teaching are not enough. Everyone needs encouragement, acknowledgement and respect. Everyone needs to know that they and their work are valued. Teachers need these too. It is a good investment in the nation's future.

1 K. F. Lim, "The joy of teaching", *Chem. Aust.*, 2012, **2012 (October)**, 37.

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‡ The full report is available at http://www.chiefscientist.gov.au/wp-content/uploads/OCS_Health_of_Australian_Science_LOWRES1.pdf.

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