Education as an opportunity for all (Note †)

Janus, the Roman god after whom January is named, has two faces, looking back to the year just ending and looking forward to the beginning year. As we look back to 2012, a major highlight has been the Olympic and Paralympic Games in London. There are no medals for those who finish outside the top three, but there is no doubt that just to complete at a major international sporting championship is to have attained an elite standard of excellence.

The essayist, G.K. Chesterton, noted an intrinsic tension, almost an inconsistency, between mass participation and excellence in national sport.² If the average national sporting ability is bad, it means that many people are participating; if the average ability is good, it means that only an elitist few are participating. As we look forward to 2013, we see Chesterton's dilemma repeated, over a hundred years later, in today's Australian educational system. All Australian jurisdictions want the participation rate of students to year 12 to increase,³ while the Melbourne Declaration states that the first gaol of Australian schooling is to promote equity and excellence.⁴

It is common that promising young athletes are given special treatment. They are removed from the mainstream sports community and nurtured at the Australian Institute of Sport and other facilities, where they can be challenged and extended. This is part of the drive towards excellence, in which excellence and elitism are unashamedly linked. This is the same spirit of the Right Stuff,⁵ which realised Kennedy's dream to put humans on the moon in less than 10 years.

The accepted Australian sporting practice of elitism is not part of the Australian educational ethos. It is part of the school systems in some neighbouring countries, where students are selected and placed in advanced streams as early as the primary years of education. In comparison, English and mathematics are the only Australian subjects, which have different offerings to cater for different groups of students, and even then only in the senior high school years. All other subjects, including junior-secondary science and senior-secondary chemistry, essentially have only one offering for all students. This is a distinctive feature of Australian education, that a "fair go" means equal opportunity for all. Promising young students are often challenged and extended through the Science Talent Search, the Chemistry Olympiad, and other programs. These students are given special treatment outside the classroom, but officially, are still in the same mainstream classroom and studying the same syllabus as all other students.

The seemingly disparate goals of having a broad base of participation in chemistry education, and of having excellence to advance national strategic objectives, is also part of the RACI's debate about the accreditation of chemistry degrees. Some critics argue that widening the definition of a degree in chemistry is lowering standards in the traditional sub-disciplines of our profession. On the other hand, other critics argue that our discipline exists in the real world and careers like molecular gastronomy and science journalism are equally valid aspects of our profession. Not all chemists work in white coats; many chemists do not work in laboratories.

Australian sport is an interesting model. A broad participation base means that there are multiple offerings, to cater for the varying interests, goals and abilities of different cohorts. At the same time, it is possible to promote excellence by having advanced streams, separate from the mainstream. The opportunities given to a potential future Olympian are not given to the weekend sportsperson. We

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need to promote the opportunity for as many as possible to participate in chemistry education. But opportunity for all is not the same as equal opportunity for all.

- 1 K. F. Lim, "Education as an opportunity for all", *Chem. Aust.*, 2012, **2012 (December)**, 37.
- G. K. Chesterton, "Patriotism and Sport", in *All Things Considered*, 1908 http://www.gutenberg.org/files/11505/11505-h/11505-h.htm%3E.
- ACARA, *The Shape of the Australian Curriculum v2.0*, Australian Curriculum, Assessment and Reporting Authority, Sydney, 2010
 http://www.acara.edu.au/verve/resources/Shape of the Australian Curriculum.pdf%3E.
- 4 *Melbourne Declaration on Educational Goals for Young Australians*, Ministerial Council on Education, Employment, Training and Youth Affairs, Melbourne, 2008 http://www.mceecdya.edu.au/mceecdya/melbourne declaration, 25979.html%3E.
- 5 T. Wolfe, *The Right Stuff*, Farrar, Straus and Giroux, 1979.

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